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Subj: C-9B T&R MANUAL

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Encl: (1) C-9B T&R MANUAL

1. Purpose. To revise standards and regulations regarding the training of C-9B aircrew per the reference.

2. Information. This revision aligns C-9B syllabi with updated Aviation T&R Program Manual policy per the reference and supersedes MCO P3500.17, Chapters 1-4.

3. Recommendations. Recommended changes to this publication are invited, and may be submitted via the syllabus sponsor (MAWTS-1) and the appropriate chain of command to: Commanding General, Training and Education Command, Aviation Training Branch via e-mail (refer to http://www.tecom.usmc.mil/atb/contacts_.htm) or the Defense Message System using the following plain language address: CG TECOM QUANTICO VA ATB.

4. Reserve Applicability. This Manual is applicable to the Marine Corps Total Force.

5. Certification. Reviewed and approved this date.

GEORGE J. FLYNN
By direction

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CHAPTER 1

C-9B PILOT

*** * N O T E * ***

Crew Resource Management (CRM) will be briefed for all flights and aircrew positions.

CHAPTER 1

C-9B PILOT

100. C-9B CORE COMPETENCY

1. Mission. The primary mission of the C-9B is to support the MAGTF Commander by providing time sensitive air transport of routine and high priority passengers and cargo as tasked by Headquarters Marine Corps Aviation Manpower and Support Branch (ASM) or the Joint Operational Support Airlift Center (JOSAC).

2. Mission Essential Task List (METL)

a. (UJTL TA 1.1.4) Conduct Sea and Air Deployment Operations
- Maintain the capability to deploy and operate from appropriately equipped CONUS and OCONUS airfields.
- Perform organizational maintenance on assigned aircraft.

b. (UJTL TA 4.2) Distribute Supplies and Provide Transport Services
- Transport commanders, staffs, and liaison personnel in theater.
- Transport Non-Government Organization representatives.
- Transport vital intelligence.
- Transport medical teams, supplies and equipment.
- Transport critical parts, supplies, and maintenance personnel.
- Support Department of Homeland Defense Operations.

c. (UJTL TA 6.4) Conduct Noncombatant Evacuation
- Provide support for evacuation operations.

3. Table of Organization

2 C-9B Aircraft
12 Pilots
6 Crew Chiefs
6 Loadmasters
6 Transportation Safety Specialists

4. Core Capability Statement

a. A core capable squadron is able to sortie one C-9B mission capable aircraft daily.

b. A core capable squadron will perform the above from either a main base location or appropriately sized and equipped forward base.

5. Mission Essential Task List/Core Skill Matrix. C-9B Pilot Core Skills directly support the METL as follows:

MISSION ESSENTIAL TASK	T2P PILOT		TAC PILOT			
	REV	CHK	NAV	FAM	CHK	RQD
A. Conduct Airlift in the JOA	X	X	X	X	X	X
B. Provide Airlift Support to DOD and other Government Agencies	X	X	X	X	X	X

6. Qualifications And Designations Tables. The tables below delineate T&R events required to be completed to attain initial qualifications and designations. All stage lectures, briefs, squadron training, prerequisites, and open and closed book NATOPS exams shall be complete and graded prior to completing evaluation flights. Qualification and designation letters signed by the commanding officer shall be placed in individual NATOPS and APR jackets.

QUALIFICATION	INITIAL EVENT QUALIFICATION REQUIREMENTS
Transport Zero Pilot (TOP)	Pilot Under Instruction who has not completed Contract Sim Syllabus.
Pilot Core Skill Introduction Complete (T3P)	Initial Simulator Training Complete (SIM-100–104) OR CNO-Approved Course, and FAM-130–134, FAM-140,141, CHK-190, Squadron level Ground Training Complete.
Pilot Core Basic Skill Complete (T2P)	200, 290
Pilot Core Skill Advanced Complete (TAC)	300, 310, 320, 390

DESIGNATION	DESIGNATION REQUIREMENTS
Transport Third Pilot (T3P)	Core Skill Introduction Complete, 20 hours in C-9B (10 of which may come from the C-9B simulator), NATOPS Open and Closed Book Tests Complete, Course Rules Exam and VMR-1 SOP Exam Complete, Current Instrument Rating
Transport Second Pilot (T2P)	Core Basic Skill Complete, 100 hours in C-9B, 800 hours Total Time, NATOPS Open and Closed Book Tests Complete, Current Instrument Rating
Transport Aircraft Commander (TAC)	Core Skill Advanced Complete, and 500 hours in C-9B (20 of which may be simulator time), 1500 hours Total Time, NATOPS Open and Closed Book Tests Complete, Current Instrument Rating
Assistant NATOPS Instructor (ANI)	TAC, 500, 501 Complete, 1000 hours Fixed Wing pilot time, NATOPS Open and Closed Book Tests Complete, Designation as a CRMF, Current Instrument Rating
Functional Check Pilot (FCP)	602, 603 Complete, Designation as a C-9B IP

101. PROGRAM OF INSTRUCTION (POI) FOR TRANSITION AND CONVERSION

1. A Transition C-9B Pilot shall be defined as a Marine Corps aviator who served previously as a Rotary-Wing aviator in the operating forces and subsequently progressed through at least Core Skill Introduction Training (T3P). A Conversion C-9B Pilot shall be defined as a Marine Corps aviator who served previously as a Fixed-Wing aviator in the operating forces and subsequently progressed through at least Core Skill Introduction Training (T3P). Differentiation between Transition and Conversion Pilots is identified here only in order to reiterate current Headquarters Marine Corps policy regarding incurred obligation following completion of C-9B flight training. The POI for Transition and Conversion C-9B Pilots is identical. Transition, and Conversion pilots shall be assigned to the Basic POI.

2. An Initial C-9B Transport Pilot Under Instruction (T0P) shall not fly as a required crewmember aboard an operational mission (cargo or passenger) until complete with Core Skill Introduction Training (Transport Third Pilot-T3P). A T3P shall fly only in the right seat on an operational mission and shall not manipulate the flight controls aboard an operational mission until complete with Core Skill Basic Training (Transport Second Pilot-T2P). However, a T3P may fly in the left seat and manipulate the flight controls aboard empty legs (no passengers and no cargo). A T2P may fly in either seat and manipulate the flight controls aboard an operational mission. The T2P qualification is established in order for the T2P to build time and experience while being given the opportunity to develop and display the headwork, situational awareness, airmanship, and flight leadership required for assignment to Core Skill Advanced Training (Transport Aircraft Commander Designation-TAC).

3. An overseas mission requires a TAC and a T2P. A T3P may serve aboard an overseas mission in addition to the required T2P.

WEEKS	COURSE/PHASE	ACTIVITY
As Req'd	Water Survival/Flight Physiology	NAWSTP
1-2	Initial Flight Simulator Training	Per Current Contract
3	Squadron Level Ground Training (FAM 0)	VMR-1
4-5	Core Skill Introduction Training (T3P)	VMR-1
6-26	Core Skill Basic Training (T2P)	VMR-1
27	Refresher Flight Simulator Training	Per Current Contract
28-52	Core Skill Advanced Training (TAC)	VMR-1

102. POI FOR REFRESHER

1. A C-9B Pilot is required to complete Refresher C-9B Pilot training after having not flown the C-9B for over 180 days. A C-9B Pilot must have flown in the capacity as a C-9B Pilot during the previous 24 months in order to be eligible for this Refresher POI. Outside of 24 months, the C-9B Pilot must complete the entire syllabus beginning with the C-9B Core Skill Introduction phase. However, the requirement to begin at the T3P Syllabus for a previously-designated TAC who hasn't flown the C-9B in over 24 months may be waived by the Squadron Commanding officer. This provision allows for a previously proficient TAC, who is returning from another DIFOP tour, to begin at the T2P syllabus. Refresher C-9B Pilots shall refresh at the level of the previously held designation. The only Refresher flight events required are the "R" coded events for the level of Refresher designation (i.e. T3P, T2P, TAC, IP, FCP). Commencement of a Refresher POI is dependent upon a recommendation by the squadron Standardization Board and approval by the squadron commanding officer. All decisions as to POI eligibility rest with the squadron commanding officer.

2. If a C-9B Pilot's annual Instrument Qualification has expired, the annual Instrument Ground School and annual Instrument Check Flight (RQD-601) shall both be completed prior to completing the final "R" coded event for the Refresher designation. For those Initial C-9B Pilots Under Instruction who have been DIFDEN for an extended period (i.e 36 months or more), the Instrument Check Flight shall be completed prior to the T3P Check Flight (CHK-190). In this case, the Instrument Flight proficiency requirements should be adjusted appropriately in order to account for the fact that the T0P is just beginning to develop C-9B proficiency. The annual Instrument Check Flight standards required of a T2P for example would easily overwhelm a T0P who is just beginning to build C-9B proficiency.

WEEKS	COURSE/PHASE	ACTIVITY
As Req'd	Water Survival/Flight Physiology	NAWSTP
1	Refresher Flight Simulator Training	Per Current Contract
2-3	Core Skill Introduction Training (T3P) (Refresher Coded Events only)	VMR-1
4	Core Skill Advanced Training (TAC) (Refresher Coded Events only)	VMR-1

103. POI FOR INSTRUCTOR PILOT UNDER TRAINING (IUT). The IUT shall have been recommended by the squadron Standardization Board and approved by the squadron commanding officer prior to commencing this POI. All decisions as to POI eligibility rest with the commanding officer.

WEEKS	COURSE/PHASE	ACTIVITY
1	C-9B Instructor Pilot Training	VMR-1

104. POI FOR FUNCTIONAL CHECK PILOT UNDER INSTRUCTION. The Functional Check Pilot Under Instruction shall have been recommended by the squadron Standardization Board and approved by the squadron commanding officer prior to commencing this POI. All decisions as to POI eligibility rest with the commanding officer.

WEEKS	COURSE/PHASE	ACTIVITY
1	C-9B Functional Check Flight Training	VMR-1

105. SQUADRON LEVEL GROUND TRAINING

FAM-130
- Preflight Inspection
- Cockpit Checkout
- Emergency Egress Drill
- Flight Planning
- Weight and Balance

Local Course Rules review and exam
VMR-1 C-9B SOP review and exam
Crew Resource Management ground training
Start/Taxi/Shutdown Procedures
Post-flight Inspection
NATOPS Open and Closed Book Examinations
Instrument Ground School (As Required)

106. INITIAL FLIGHT SIMULATOR TRAINING

1. Purpose. Familiarize all pilots with C-9B normal cockpit procedures, CRM, systems operation and limitations, emergency procedures and to introduce instrument flight procedures.

2. General. As of the writing of this T&R, the C-9B Simulator contract is in a transitional period. In order to allow for significant changes in the C-9B Simulator syllabus without a requirement for a rewrite to the T&R, both the current and future C-9B Simulator syllabi are presented in this T&R. The current Simulator syllabus is described first (SFAM/INST-100 through SFAM/INST-104) and the proposed future Simulator Syllabus is described second [Fixed Base Simulator Periods (FBS) 1 through 4 (SIM-105-108) and Simulator Periods 1 through 8 (SIM-109-116)].

3. Re-fly Interval. Following Initial Simulator training, a T3P should attend Refresher Simulator training six months after commencing the T3P squadron flight syllabus. This prepares the T3P for evaluation and designation as a T2P. However, the six-month Refresher Simulator syllabus is not a prerequisite for designation as a T2P. After completion of the six-month Refresher Simulator syllabus, pilots should attend Refresher Simulator training (SIM-117-119) or the proposed new syllabus (SIM-120-122) every 12 months (not to exceed 18 months). If a C-9B Pilot goes over 18 months without simulator refresh, he will be considered down until refreshed.

4. Crew Resource Management (CRM). CRM shall be introduced and reinforced during Initial Simulator training.

5. Current C-9B Initial Simulator Training (5 Periods, 20.0 Hours)

SFAM/INST-100 4.0 S

Goal. Simulator configuration, characteristics and initial familiarization.

Requirement. Seat position and pedal adjustments. Takeoff data computation. Cockpit setup and checklist. Crew briefing. Engine starts (normal). Taxi techniques (brakes, steering, use of thrust reverser). Normal takeoff and climb to median altitude (EPR management), level turns (manual rudder demonstration), accelerate to Vmo and decelerate with speed brake (note over speed warning). Steep turns. Roll rate demonstration. Demonstrate flight characteristics with configuration changes: landing gear, slats, flaps, slow flight. Approach to stall (clean, turning, and landing). Two engine flight director ILS and landing. Time permitting, repeat takeoff and ILS. After landing, review shutdown and before leaving aircraft procedures.

SFAM/INST-101 4.0 S

Goal. Flight characteristics demonstration.

Requirement. Cockpit setup and checklist, APU fire on start. Engine starts: hot or hung. Instrument takeoff (ceiling 100 feet) and vector climb (12,000-14,000 feet). Dutch roll demonstration. High sink demonstration. Slow flight. Steep turns. Approach to stalls clean, turning, landing. Two engine autopilot ILS and landing (time permitting). VOR approach and landing. Manual spoilers. After landing, shutdown and before leaving aircraft procedures.
Prerequisite. SFAM/INST-100.

SFAM/INST-102 4.0 S

Goal. Introduce emergency procedures.

Requirement. Cockpit setup and checklist. Engine starts: battery and cross bleed. Rejected takeoff (engine failure prior to Vl). Ice protection during takeoff and climb (engine, airfoil and fuel). Normal takeoff and SID departure. Climb to FL350 using normal climb schedule. Manual pressurization during climb. Emergency descent to 14,000 feet. Steep turns. Approach to stalls. Unusual attitudes. Slow flight (optional). Area arrival and holding. Two engine Flight

Director (F/D) ILS and missed approach. Engine failure in flight. Single engine raw data ILS and landing.

Prerequisite. SFAM/INST-101.

SFAM/INST-103 4.0 S

Goal. Review abnormal operations procedures.

Requirement. Cockpit setup and checklist. Engine start (hot or hung start optional). Engine failure prior to Vl. Engine failure at Vl +10. One engine F/D ILS and published missed approach. Simulated airstart of the failed engine. Back course ILS to full stop.

Prerequisite. SFAM/INST-102.

SFAM/INST-104 4.0 S

Goal. Emergency procedures refinement.

Requirement. Cockpit setup and checklist. Engine start (CSD oil pressure low light). Crosstie failure or crosstie lockout. Engine failure at Vl +10. One engine F/D ILS and missed approach. Air start the failed engine. RADAR vector climb to 12,000 to 14,000 feet. Tail compartment high temp light on. Loss of airspeed indication. ILS approach and landing without air speed indication. Takeoff and climb with runaway trim, ILS approach with jammed stabilizer. Non precision approach and missed approach. Raw data ILS approach and landing.

Prerequisite. SFAM/INST-103.

6. Future C-9B Initial Simulator Training (12 Periods, Hours TBD)

SIM-105 Hours TBD Fixed Base Simulator

Goal. Introduce Fixed Base Simulator configuration, characteristics and initial familiarization. Introduce checklists and flight profile. FBS Period 1.

Requirement. Brief: Pilot and Crew Chief Roles, Checklists and SOPs, CRM, Automation, Flight Planning, APU, Static Takeoff Profile, Navigation Techniques, ILS Profile, Fire Detection and Protection. Conduct: APU Start, Before Starting Engines Checklist, Mach Airspeed Indicator (MASI), Altimeters, Starting Engine Checklist, Taxi Checklist, Taxi, Before Takeoff Checklist, Lineup Checklist, Normal Takeoff, After Takeoff Checklist, Area Departure, 10,000’ Checklist, 18,000’ Checklist, Enroute Descent Checklist, Approach Checklist, Area Arrival, Coupled ILS Approach, Landing Checklist, After Landing Checklist, Fire Protection/Detection Emergency Procedures, Engine Shutdown Checklist, Pilot Secure Checklist.

SIM-106 Hours TBD Fixed Base Simulator

Goal. Introduce Malfunctions and Emergencies, Non-Precision Approach, Missed Approach. FBS Period 2.

Requirement. Brief: Flight Planning review, Noise Abatement Takeoff, Non-Precision Approach Profile, Missed Approach Profile, Engine System review, Hydraulic System review, Fuel System review. Conduct: All Checklists, Abnormal Engine Starts, Taxi, Normal Takeoff, Area Departure to 12,000', Engine Emergency Procedures, Hydraulic Emergency Procedures, Fuel System Emergency Procedures, Inflight Fuel Imbalance, Area Arrival, Coupled Non-Precision Approach, Missed Approach, Coupled ILS Approach.

Prerequisite. SIM-105.

SIM-107 Hours TBD Fixed Base Simulator

Goal. Introduce Cold Weather Operations, Malfunctions and Emergencies, RAW Data Approach. FBS Period 3.
Requirement. Brief: Flight Planning review, Cold Weather Operations (Ground and Flight), Pneumatic System review, Pressurization System review, Air Conditioning System review, Ice and Rain Protection System review, Electrical System review. Conduct: All Checklists, Taxi, Normal Takeoff, Area Departure to 12,000' then to FL 350, Pressurization/Air Conditioning Emergency Procedures, Ice Protection Emergency Procedures, Electrical System Malfunctions, Area Arrival, Raw Data ILS Approach.

Prerequisite. SIM-106.

SIM-108 Hours TBD Fixed Base Simulator

Goal. Introduce Summer Operations, Malfunctions and Emergencies, Localizer Approach. FBS Period 4.

Requirement. Brief: Flight Planning review, Summer Operations, Pattern Go-Around Checklist, Landing Gear System review, Brake System review, Flight Control System review, General Systems review. Conduct: All Checklists, Abnormal Engine Starts, Taxi, Normal Takeoff, Area Departure to 12,000', Flight Control Emergency Procedures, Landing Gear Emergency Procedures, Brakes Emergency Procedures, Navigation System Emergency Procedures, Area Arrival, Localizer Approach, Go-Around Missed Approach.

Prerequisite. SIM-107.

SIM-109 Hours TBD S

Goal. Introduce Flight Simulator configuration, characteristics and initial familiarization. Introduce checklists and flight profile. Introduce airwork and landings. SIM Period 1.

Requirement. Brief: Takeoff Maneuver, Aerodynamic Characteristics, Steep Turns, Approach to Stalls, Visual Approach, Landing, Crosswind Procedures, Touch and Go Procedures. Conduct: All Checklists, Normal Takeoff, Area Departure to 12,000', Steep Turns, Approach to Stall Series, Coupled ILS Approach, Hand Flown Visual Approaches, Multiple Landings.

Prerequisite. SIM-108.

SIM-110 Hours TBD S

Goal. Introduce Cold Weather and Low-Visibility Operations, Holding, DME ARC, Non-Precision Approaches. SIM Period 2.

Requirement. Brief: Cold Weather Operations (Ground and Flight), Instrument Takeoff, DME Arc, ILS Approach, Holding, Non-Precision Approaches, Rejected Landing. Conduct: All Checklists, Cold weather/Low Visibility Taxi, Low-Visibility Takeoff, Area Departure, Radial Intercepts, Steep Turns, Approach to Stall Series, Area Arrival, DME Arc, ILS Approach, Holding, Localizer Approach, NDB Approach.

Prerequisite. SIM-109.

SIM-111 Hours TBD S

Goal. Introduce Abort Procedures (low and high speed), Single Engine Emergencies, PAR Approach, TACAN Approach. SIM Period 3.

Requirement. Brief: Abort Procedures, Traffic Pattern Management, Non-Precision Approaches, Circling Approach, Engine Loss on Takeoff, Single Engine ILS Approach, Single Engine Go Around. Conduct: All Checklists, Low Speed Abort Procedures, Crosswind Takeoff, GPS/RNAV Approach, Flight at Vmca, PAR Approach, TACAN Approach, Circle to Land, High Speed Abort Procedures, Engine Loss on Takeoff, Single Engine ILS Approach.

Prerequisite. SIM-110.

SIM-112 Hours TBD S

Goal. Introduce TCAS System, Hydraulic Emergencies. SIM Period 4.

Requirement. Brief: Engine Loss on Takeoff, TCAS System review, Single Engine Non-Precision Approach, Single Engine Traffic Pattern Management, V2 Cut, EGPWS, Total Hydraulics Failure, No Flap Slats Retracted Approach, Hydroplaning. Conduct: Engine Loss on Takeoff, TCAS RA, LOC DME Back Course Approach, Engine Failure during Missed Approach, Single Engine VFR Landing, V2 Cut, Single Engine ILS with Flight Director, Crosswind Takeoff, Total Hydraulic Failure.

Prerequisite. SIM-111.

SIM-113 Hours TBD S

Goal. Introduce Pressurization Emergencies, Flight Control Malfunctions, Total Electrical Failure, Engine Emergencies in IMC. SIM Period 5.

Requirement. Brief: Cabin Altitude/Rapid Depressurization, Emergency Descent, Unusual Attitude Recovery, Horizontal Stabilizer Trim Runaway, Jammed Stabilizer Approach and Landing, ASR Approach, PAR Approach, CAT II Monitored Approach, Total Electrical Failure, Dual Engine Failure. Conduct:

Crosswind Takeoff, Cabin Altitude/Rapid Depressurization, Emergency Descent, Unusual Attitude Recovery Techniques, Horizontal Stabilizer Trim Runaway, Jammed Stabilizer Approach and Landing, ASR Approach, Low Visibility Takeoff with Engine Failure at V1, Engine Fire, Engine Seizure, Single Engine PAR Approach, CAT II ILS Monitored Approach, RAW Data ILS with Dual Generator Failure.

Prerequisite. SIM-112.

SIM-114 Hours TBD S

Goal. Thrust Reverser Emergencies, Slats/Slats Malfunctions, Windshear, Emergency Ground Evacuation. SIM Period 6.

Requirement. Brief: Inadvertent In-Flight Thrust Reversing, Slat Disagreement, Flaps 40 Slats Retracted Approach and Landing, Emergency Evacuation, Ditching, Windshear. Conduct: Takeoff, Reroute, GPS/RNAV Approaches, Inadvertent Thrust Reverser Deployment on Takeoff, Single Engine ILS, Single Engine Go Around, Windshear after Takeoff, Windshear during Approach, No Slat/Flaps 40 Approach, Landing Gear Collapse and Ground Emergency Evacuation Checklist.

Prerequisite. SIM-113.

SIM-115 Hours TBD S

Goal. Introduce Check Ride Profile. SIM Period 7.

Requirement. Brief: Practice Check profile, Aircraft Exterior Inspection. Conduct: All Checklists, Crosswind Takeoff in Low Visibility, Area Departure to 12,000', Steep Turns, Approach to Stall Series, Area Arrival, Holding, Non-Precision Approach, Missed Approach, Localizer to Crosswind Landing, Abort on Takeoff, PAR, Engine Failure at V1, Single Engine ILS Approach and Landing.

Prerequisite. SIM-114.

SIM-116 Hours TBD S

Goal. RVSM Briefing. SIM Period 8.

Requirement. Brief: RVSM Procedures, Required RVSM Equipment, Equipment Malfunctions in RVSM Airspace. Conduct: Reference and review required RVSM equipment in the Flight Simulator.

Prerequisite. SIM-115.

107. REFRESHER FLIGHT SIMULATOR TRAINING

1. Purpose. Review C-9B normal cockpit procedures, CRM, systems operation and limitations, emergency procedures, and instrument flight procedures.

2. General. As of the writing of this T&R, the C-9B Simulator contract is in a transition period. In order to allow for significant changes in the C-9B Refresher Simulator syllabus without a requirement for a rewrite to the T&R, both the current and future C-9B Simulator Refresher Syllabi are presented in this T&R. The current Simulator Syllabus is described first (Day One through

Day Three). The proposed future Simulator Syllabus is described as consisting of select portions of the future C-9B Initial Simulator syllabus. The content of this future Refresh Simulator syllabus is TBD.

3. Re-fly Interval. Following Initial Simulator training, a T3P should attend Refresher Simulator training six months after commencing the T3P squadron flight syllabus. This prepares the T3P for evaluation and designation as a T2P. However, the six-month Refresher Simulator syllabus is not a prerequisite for designation as a T2P. After completion of the six-month Refresher Simulator syllabus, pilots should attend Refresher Simulator training every 12 months (not to exceed 18 months). If a C-9B Pilot goes over 18 months without simulator refresh, he will be considered down until refreshed.

4. Crew Resource Management (CRM). CRM shall be reviewed during Refresher Simulator training.

5. Current Refresher Simulator Training (3 Periods, 24.0 Hours)

SIM-117 8.0 R E S

Goal. Review Engine and Fuel System Malfunctions and High Altitude/Hot Weather Performance. Day 1.

Requirement. Brief: Start Malfunctions, Engine Failure during Critical Phase of Flight, Approach to Stall Series, Windshear, Programmed Emergencies, Performance Related to CFL/MRTW/Obstacle. High Altitude/Hot Weather Takeoff. Approach Climb Limitations. Conduct: Engine Start Malfunctions, Normal Takeoff, Engine Failure at V1, Main Gear Tire Failure, Aborted Takeoff, High Altitude/Hot Weather, Steep Turns, Approach to Stall Series, Windshear on Takeoff, Dual Engine ILS Approach, Single Engine ILS Approach, Non-Precision Approach, Missed Approach (Single Engine and Dual Engine), Approach Climb Limited Approach, Normal and Single Engine Landings, Engine and Fuel System Malfunctions.

Prerequisite. C-9B Initial Simulator Training.

SIM-118 8.0 R E S

Goal. Review Electrical and Hydraulic Systems Malfunctions and Emergencies. Day 2.

Requirement. Brief: Electrical/Hydraulic Systems Abnormal Operations, Abnormal Configuration Approaches and Landings, Ground Shift Mechanism Failure, Performance Related to Inoperative Components. Conduct: Electrical System Checks, Engine Driven Hydraulic Pump Failure, Abnormal Annunicator Indications, Ground Shift Mechanism failure on Takeoff, Progressive Electrical Failures to Emergency Power Operation, Progressive Hydraulic Failures, Alternate/Emergency Gear Extension, Emergency Power/Single Generator Approach, No Flap No Slat/Slats Only/Flaps Only Approaches, Engine failure on short final, Land from above Approaches, Ground Shift Mechanism failure Landing, Brake Failure on Landing, Electrical Fire, AC/DC Failures, Sensing Failures, Hydraulic System Overheat.

Prerequisite. SIM-117.

SIM-119 8.0 R E S

Goal. Review Pneumatic System Malfunctions and Emergencies. Day 3.

Requirement. Brief: Anti-Ice/De-Ice Systems, Cold Weather Procedures, Rapid Decompression Procedures, Cold Weather Limitations and High Altitude Flight, CAT II Procedures, Emergency Checklists, Performance related to use of Ice Protection, Cruise, Holding, use of Alternate. Conduct: Engine and Airfoil Anti-Ice use, Annunciator Actions, Takeoff with Anti-Icing Equipment on, Annunciator Light Review, Tail Compartment Overheat, Rapid Decompression, Area Arrival from Emergency Descent, Iced Tail Procedures, CAT II Procedures, Dual Engine flameout, Contaminated runway landing, Anti-ice normal/abnormal after landing procedures, Use of Fuel Heat, In flight Thrust Reverser deployment, Rudder Travel Unrestricted Light not on for Takeoff.

Prerequisite. SIM-118.

6. Future Refresher Simulator Training (3 Periods, 24 Hours). The proposed future Simulator Syllabus is described as consisting of select portions of the future C-9B Initial Simulator syllabus. The content of this future refresh syllabus is TBD and may continue as CNO-approved SIM-120, 121, 122 etc.

108. FLIGHT TRAINING PERFORMANCE REQUIREMENTS

1. Purpose. Familiarize all pilots with C-9B flight characteristics, normal cockpit procedures, crew coordination, systems operations and limitations, and emergency procedures. Obtain designation as a Transport Third Pilot, Transport Second Pilot, Transport Aircraft Commander, Instructor Pilot, and Functional Check Pilot.

2. General

a. The time required to train a C-9B pilot from Transport Third Pilot (T3P) to Transport Aircraft Commander (TAC) is listed in the NATOPS Flight Manual, but will vary from that minimum depending on previous pilot experience. Intent is to ensure that a C-9B pilot has been exposed to C-9B Flight Operations during all four seasons prior to designation as a TAC. This generally corresponds with the point at which a C-9B pilot has obtained the 500 hours required for designation as a TAC. Training beyond T3P is accomplished by building experience during operational flights and syllabus flight events. Syllabus events and upgrade checks for T2P, TAC, IP, and FCP shall be accomplished on dedicated training flights, with the exception that the TAC Route Check (NAV-300) should be conducted on an operational mission and the TAC Overwater Check (NAV-310) may be conducted during either an operational mission or dedicated training mission.

b. Due to the maneuvers involved, syllabus events shall consist of a Minimum Crew. Minimum crew shall consist of an instructor pilot(s), pilot(s) under instruction, and crew chief for all training flights. An additional TAC, T2P, or T3P may serve in the position of crew chief aboard any training flight in the event of a crew chief shortfall. Exceptions to this rule are the syllabus events NAV-300 and NAV-310. NAV-300 (TAC Route Check) should be conducted with a full crew on an operational mission. NAV-310 (TAC Overwater Check) may be conducted with either minimum crew on a dedicated training mission or on an operational mission with a full crew.

c. Pilots Under Instruction shall be in the left seat for all training flights unless otherwise noted in the training syllabus (i.e. SIM-120, NAV-300, 310, IUT-500, 501, FCP-602, 603).

d. All training flights shall be flown with a designated NATOPS Instructor, with the exception of Instrument Evaluation Flights (RQD-601) which may be flown with any TAC who is designated on the squadron Instrument Board.

e. Flights annotated with an "N" shall be flown at night with the intent that these night flights will be flown at least 30 minutes after official sunset. Flights annotated with "(N)" may be flown at night.

f. All flights annotated with an "E" shall be considered as check flights. Successful completion of an “E” coded event signifies that the pilot is prepared to assume the new level of responsibility associated with that new designation. If a pilot fails to meet NATOPS or T&R standards for the designation, the pilot should be remediated through additional training flights and a refly of the “E” coded event should take place.

3. Re-fly Interval. The syllabus matrix, paragraph 170, displays the re-fly interval (in days) and Combat Readiness Percentage for MOS 7551. For example, the interval is measured in days a pilot may fly a particular code(s) with a 180 day re-fly interval during the second week of January. The pilot is required to re-fly that code(s) within 180 days. An * indicates no re-fly interval.

4. Aircrew Evaluation Flights. All pilots are required to have a NATOPS evaluation form filled out annually upon completion of any of the following:

a. NATOPS Check (RQD-600).

b. Instrument Check (RQD-601).

c. An evaluation flight which marks the completion of the Core Skill Introduction Phase (T3P Check), Core Skill Basic Phase (T2P Check), or Core Skill Advanced Phase (TAC Check), Instructor training, or FCP training.

5. Crew Resource Management (CRM). CRM shall be briefed for all flights and/or events. In addition to annual CRM Ground Training, the requirement for an annual CRM flight evaluation should be fulfilled during either a check flight for upgrade to T3P, T2P, TAC, IP, FCP, or on an annual NATOPS or Instrument check flight. The resulting Aviation Training Form (ATF) and NATOPS Designation Application paperwork must indicate that the CRM training was conducted. Additionally, any dedicated training flight during which CRM training is conducted with an Instructor Pilot who is also designated as a Crew Resource Management Facilitator or Instructor (CRMF or CRMI) shall also fulfill the requirement for an annual CRM flight evaluation. In this case, a grade sheet shall be generated and must indicate that the CRM training was conducted.

6. C-9B Pilot Currency. See Pilot and Copilot Currency Matrix on page 1-25.

a. TAC Currency. For currency purposes a SIM event shall establish the same currency as a flight. A TAC shall not sign for an aircraft if it has been over 30 days since his last flight in either crew position (TAC or copilot). In this case, the TAC shall regain currency by flying one flight as a copilot prior to flying as a TAC. A TAC shall not fly as a TAC or copilot if it has been over 60 days since his last flight in either crew position (TAC or copilot). In this case, the TAC shall regain currency by flying a trainer

as a copilot with another TAC prior to flying as a TAC. A TAC shall not fly as a TAC or copilot if it has been over 90 days since his last flight in either crew position (TAC or copilot). In this case, the TAC shall regain currency by flying a trainer with another TAC and a NATOPS Check Flight with a C-9B Instructor Pilot prior to flying as either a TAC or copilot. A C-9B TAC is required to complete Refresher C-9B Pilot training after having not flown the C-9B for over 180 days. A C-9B TAC must have flown in the capacity as a C-9B Pilot during the previous 24 months in order to be eligible for the Refresher POI. Outside of 24 months, the C-9B TAC must complete the entire syllabus starting with the C-9B Core Skill Introduction phase. For a previously designated TAC who has returned after over 24 months without a C-9B flight, the T3P Refresher Syllabus may be waived at the discretion of the Squadron Commanding officer. This is to allow for a previously proficient TAC who is returning from a DIFOP tour to begin with the T2P syllabus.

b. Copilot (T3P, T2P) Currency. For currency purposes a SIM event shall establish the same currency as a flight. A copilot shall not fly aboard an operational mission if it has been over 60 days since his last flight. In this case, the copilot shall regain currency by flying 1 trainer with a TAC. If it has been over 90 days since a copilot's last flight, he shall regain currency by flying a trainer with a C-9B Instructor Pilot and a NATOPS Check Flight with a C-9B Instructor Pilot. A copilot is required to complete Refresher C-9B Pilot training after having not flown the C-9B for over 180 days. A copilot must have flown in the capacity as a C-9B copilot during the previous 24 months in order to be eligible for the Refresher POI. Outside of 24 months, the copilot must complete the entire syllabus beginning with the C-9B Core Skill Introduction phase.

109. CORE SKILL INTRODUCTION TRAINING

1. Familiarization and Instruments

a. Purpose and Performance Requirements. Instruct PUI in aircraft ground handling; VFR and IFR flight characteristics and limitations, with emphasis on instrument flight procedures and proper response to aircraft emergency situations.

b. Crew Requirement. IP/PUI/CC.

c. Ground Training. (1 Event - FAM-130).

d. Flight Training (3 Flights, 9.0 Hours)

FAM-130	N/A	A

Goal. Introduction to C-9B Preflight Planning, Checklists, Preflight Walkaround, Emergency Egress Procedures, and Weight and Balance.

Requirement. Introduce Preflight Inspection, Cockpit Checkout, Checklists, Emergency Egress Drill, Flight Planning, and Weight and Balance.

FAM-l31	3.0	A

Goal. Introduce C-9B normal flight maneuvers.

Requirement. Brief: APU, checklists, flight director, Phase II Avionics departure and approach set-up procedures, instruments, engine start, takeoff procedures, climb, airwork (climbs, level

offs, descents, level turns, roll rate demonstration, power management, speed changes with/without speedbrakes, High Sink Rate Demo, Steep Turns), approach and landing configuration, speeds, and procedures, TOLD cards, CRM. Conduct: review preflight inspection, operation of cabin doors, cockpit emergency equipment and exits, cockpit checklist. Introduce engine start, taxi, braking and steering techniques and crew briefing items. Introduce static takeoff (15° flaps), climbs, level offs, descents, level turns, steep turns, roll rate demonstration, speed brake usage, High Sink Rate Demonstration, and power management. IP demonstrated visual recovery and touch-and-go landing followed by PUI performing touch-and-go landings and full stop landing with auto spoiler.

Prerequisite. Completion of the Initial Simulator Syllabus.

FAM/INST-132 3.0 R A

Goal. Review C-9B normal flight maneuvers.

Requirement. Brief: engines/oil system, air conditioning system, radar, INS, FMS, approach/landing configuration/speeds, holding and procedure turns, missed approach, critical action emergency procedures and performance data. Conduct: review preflight inspection, cockpit checklist, engine start, taxi, braking and steering techniques and crew briefing items. Introduce rolling takeoff (15° or 5° flaps), approach to stall series, SFD turns, holding, ILS/GCA, non-precision approaches, circling, missed approach procedures. Review steep turns, visual approaches to touch-and-go landings and full stop landings with auto spoiler.

Prerequisite. FAM/INST-131.

FAM/INST-133 3.0 R A

Goal. Introduce emergency procedures.

Requirement. Brief: fuel system, pneumatic system, anti-ice system, oxygen system, aborted takeoff, rapid decompression/emergency descent, high altitude/high speed characteristics, critical action emergency procedures, and performance data, simulated engine failure at V1. Conduct: review preflight, start (cross bleed), taxi items on FAM/INST-l00 and FAM/INST-l0l. Review rolling take off (15° flaps). Introduce simulated engine failure after Vl, use of autopilot and emergency descent. Perform visual, GCA and ILS approaches with raw data inputs, coupled autopilot, one engine, zero flaps or slats retracted as appropriate to touch-and-go or full stop landing. Introduce single engine go-around and manual spoiler full-stop landing.

Prerequisite. FAM/INST-132.

2. Night Familiarization

a. Purpose and Performance Requirements. Become proficient in night operations and emergency responses at night.

b. Crew Requirement. IP/PUI/CC.

c. Flight Training (1 Flight, 3.0 Hours)

NFAM-134 3.0 R A N

Goal. Review FAM/INST maneuvers at night.

Requirement. Brief: electrical system, electrical fire and smoke/fume elimination, standard voice calls, minimum maneuver speeds, CRM Mission Analysis and Situational Awareness. Introduce interior/exterior lighting. Conduct: review preflight/start/taxi items covered on FAM/INST-100 through FAM/INST-102. Perform rolling takeoff with 15° flaps, ILS and GCA approaches. Perform single engine ILS approach. Review touch-and-go landings. Review full stop manual spoiler landing.

Prerequisite. FAM/INST-133.

3. Copilot Familiarization

a. Purpose and performance requirements. To instruct the PUI in the responsibilities and functions of the pilot flying in the right seat.

b. Crew Requirement. IP/PUI/CC.

c. Flight Training (2 Flights, 6.0 Hours)

FAM-140 3.0 R A (N)

Goal. PUI in right seat to perform duties of copilot.

Requirement. Brief: fire procedures, hydraulics/flight controls, performance, de-rated thrust takeoff. Conduct: review preflight/start/taxi crew briefing items covered on previous flights. Introduce engine battery start, static takeoff (15° or 5°) flaps, derated thrust takeoff), and manual pressurization. Review all approaches and landings covered on previous flights. Introduce maximum performance full stop landing.

Prerequisite. FAM/INST-133.

FAM-141 3.0 R A

Goal. PUI in left or right seat at discretion of IP. Review all previously introduced material in preparation for T3P Check Flight.

Requirement. Brief: OPARS flight planning, flight in high altitude structure, and line mission considerations. Introduce high altitude flight regime to include the following: Filing criteria, long range cruise considerations, and navigation procedures. Conduct: review engine failure at V1, emergency return, steep turns, approach to stall series, SFD turns, emergency descent, precision and non-precision approaches, circling approach, holding, single engine ILS, SFD ILS, no-flap/no-slat approach and landing, single engine go-around, manual spoiler full stop landing. Emphasize emergency procedures and abnormal situation responses.

Prerequisite. FAM-140, NFAM-134.

4. T3P Check

a. Purpose. Qualify the PUI as copilot (T3P) for operational flights in the C-9B aircraft.

b. Crew Requirement. IP/PUI/CC.

c. Prerequisite. NATOPS open and closed book examinations.

d. Flight Training (1 Flight, 3.0 Hours)

CHK-190 3.0 R A E

Goal. Evaluation sortie.

Requirement. PUI to demonstrate the ability to meet NATOPS qualification per Chapter 18 NATOPS evaluation criteria. The flight evaluation is designed to measure with the maximum objectivity the degree of standardization demonstrated by the PUI and to ensure safety of flight. Brief: systems and limitations, bold-face emergency procedures. Conduct: review engine failure at V1, emergency return, steep turns, approach to stall series, SFD turns, emergency descent, precision and non-precision approaches, circling approach, holding, single engine ILS, SFD ILS, no-flap/no-slat approach and landing, manual spoiler full-stop landing. The T3P Check should emphasize only those areas that are germane to copilot duties and demonstrated performance required to safely terminate a flight in the event of aircraft commander incapacitation.

Prerequisite. NATOPS Open and closed book examinations complete. FAM-141. 20 hours in C-9B (10 of which may come from the simulator). Current Instrument Rating. Course Rules exam and VMR-1 SOP exam complete.

110. CORE SKILL BASIC TRAINING

1. Copilot Review

a. Purpose. Review procedures, normal and emergency, and the responsibilities of the copilot.

b. Crew Requirement. IP/T3P/CC.

c. Flight Training (1 Flight, 3.0 Hours)

REV-200 3.0 R A

Goal. Refine copilot performance.

Requirement. T3P in the left seat to perform duties of the pilot. Brief: Systems and limitations, bold-face emergency procedures, performance. Conduct: review preflight/start/taxi crew briefing, FMS/GPS/INS operation, engine failure at V1, emergency return, steep turns, approach to stall series, SFD turns, emergency descent, precision and non-precision approaches, circling approach, holding, single engine ILS, single engine go around, SFD ILS, no-flap/no-slat approach and

landing, manual spoiler full-stop landing., emphasize emergency procedures and abnormal situation responses.

Prerequisite. CHK-190.

2. T2P Check

a. Purpose. Qualify the T3P as a T2P copilot for operational flights in the C-9B aircraft.

b. Crew Requirement. IP/T3P/CC.

c. Prerequisite. NATOPS open and closed book examinations.

d. Flight Training (1 Flight, 3.0 Hours)

CHK-290 3.0 R A E

Goal. Evaluation sortie.

Requirement. PUI to demonstrate the ability to meet NATOPS qualification per Chapter 18 NATOPS evaluation criteria. The flight evaluation is designed to measure with the maximum objectivity the degree of standardization demonstrated by the PUI and his ability to handle the aircraft under any circumstances. Primary emphasis shall be placed on emergency procedures, flying skill, command mentality, and judgment. Brief: PUI should demonstrate a thorough knowledge of NATOPS systems and limitations, bold-face emergency procedures should be memorized, PUI should demonstrate a thorough knowledge of annunciator lights and usual pilot responses. Conduct: engine failure at V1, emergency return, steep turns, approach to stall series, SFD turns, emergency descent, precision and non-precision approaches, circling approach, holding, single engine ILS, SFD ILS, no-flap/no-slat approach and landing, manual spoiler full-stop landing.

Prerequisite. NATOPS Open and closed book examinations complete. REV-200 complete. 100 hours in C-9B. 800 hours total time. Current Instrument Rating.

111. CORE SKILL ADVANCED TRAINING

1. TAC Route Check

a. Purpose. Conduct a route check flight prior to upgrade to TAC.

b. Crew Requirement. IP/T2P/CC/Loadmaster (LM)/Flight Attendant (FA).

c. Flight Training (1 Flight, 6.0 Hours)

NAV-300 6.0 R A (N) E

Goal. Pilot under instruction performs extended range operations and alternates between left and right seats throughout the mission in order to demonstrate flight leadership from either seat.

Requirement. T2P shall demonstrate the ability to supervise preflight preparation and manage a crew and aircraft away from

home station on an operational mission that includes an RON. Brief: mission coordination, flight planning, weather, fuel planning, load computations, performance, CRM. Conduct: PUI shall demonstrate flight leadership and Crew Resource Management by acting as the TAC during an operational mission that includes an RON. During the trip, the TAC/T2P shall conduct a two-engine instrument approach and landing from the right seat.

Prerequisite. CHK-290.

2. TAC Overwater Check

a. Purpose. Conduct an overwater check flight for T2P prior to upgrade to TAC, and to maintain ICAO proficiency for the TAC (6 month refly *). Flight must include a RON and an overwater leg of at least 1,300 nautical miles.

* A TAC should not fly as the signing TAC aboard an overwater mission if it has been over 6 months since returning from the last overwater mission. This requirement may be waived up to 12 months at the discretion of the Squadron Commanding officer in order to account for a TAC who has a considerable amount of previous C-9B overseas experience.

b. Crew Requirement. IP/T2P/CC/LM/FA.

c. Flight Training (1 Flight, 8.0 Hours)

NAV-310 8.0 R A (N) E

Goal. Pilot Under Instruction conducts overwater navigation. Evaluation legs should be conducted with the PUI in the right seat.

Requirement. TAC/T2P to demonstrate the ability to manage a crew and aircraft on an extended, overwater flight under ICAO rules. Brief: Mission coordination, crew briefing, ATFP briefing coordination, coordination meeting, flight planning, weather brief, fuel planning, weight and balance, aircraft inspection, cargo inspection (as required), manifest inspection, trip message review, foreign clearance guide review, navigation kit (football), survival gear inspection, fuel computations, performance, supervise loadmaster in arranging for billeting, crew ground transportation, customs, and agriculture inspection. Conduct: TAC/T2P to conduct overwater navigation in accordance with ICAO convention, from the right seat. During the trip, the TAC/T2P shall conduct a two-engine instrument approach and landing from the right seat.

Prerequisite. CHK-290.

3. TAC Check

a. Purpose. Review all previously covered items and ensure that the T2P is adequately prepared for a TAC check.

b. Crew Requirement. IP/T2P/CC.

c. Flight Training (2 Flights, 6.0 Hours)

FAM-320 3.0 R A E

Goal. Review all previous maneuvers.

Requirement. Review all C-9B previous NATOPS normal and emergency procedures. Demonstrate ability to lead and coordinate crew during emergencies, plus meet all previous NATOPS requirements. T2P in the left seat. Brief: Similar to the brief required for CHK-290 except that the T2P shall demonstrate a more extensive, in depth knowledge of systems and limitations, bold-face emergency procedures, warning and caution lights, bold-face immediate action procedures, performance. Additionally, the PUI shall demonstrate a working knowledge of all governing operational directives such as NATOPS, OPNAV 3710, FAR/AIM, ICAO convention, SOP, and FTI. Conduct: review aircraft data book (ADB), engine failure at V1, emergency return, steep turns, approach to stall series, SFD turns, emergency descent, precision and non-precision approaches, circling approach, holding, single engine ILS, single engine go around, SFD ILS, no-flap/no-slat approach and landing, manual spoiler full-stop landing. Emphasize emergency procedures and abnormal situation responses. Event shall conclude with a review of NALCOMIS flight data entry.

Prerequisite. CHK-290.

CHK-390 3.0 R A E

Goal. Evaluation flight. Qualify the T2P as a Transport Aircraft Commander (TAC) for operational flights in the C-9B.

Requirement. T2P to demonstrate ability to meet NATOPS evaluation criteria for TAC. The flight evaluation is designed to measure with maximum objectivity the degree of standardization, knowledge, and ability of the PUI to handle the aircraft under any circumstances.

Prerequisite. NATOPS open and closed book examinations complete. NAV-300, 310, FAM-320. 500 hours in the C-9B (20 of which may be simulator time). 1500 hours total time. Current Instrument rating.

112. INSTRUCTOR TRAINING

1. Purpose. Conduct Instructor Pilot training. An IP is qualified to instruct in all phases of aircraft operations. SqdnO P3710.1K (VMR-1 SOP for Flight Operations) delineates duties that may be performed. Intent is for TAC to progress through both the IUT and FCP syllabus. The IUT syllabus should be conducted first, then the FCP syllabus. If conducted in this manner, every FCP shall also have been designated as an IP and will be able to conduct the training to make new FCPs.

2. Crew Requirement. IP/IUT/CC.

3. Prerequisite. CRM Facilitator.

4. Flight Training (2 Flights, 6.0 Hours)

IUT-500 3.0 R A E

Goal. Instruction introduction.

Requirement. IUT in right seat. Brief: exchange of flight controls, conduct of training flight. Conduct: IUT in right seat coaches IP through taxi procedures. IUT conducts normal takeoff and initiates a simulated engine failure at V1 and demonstrates an emergency return. IUT conducts steep turns, high-sink rate recovery, approach to stall series, emergency descent, holding, precision and non-precision approaches, single engine approach, single engine go-around, no-flap/no slat approach and landing, circling, manual spoiler full stop landing, exchange of flight controls at a safe taxi speed. Demonstrate ability to perform all maneuvers in standardized manner, and to recognize and correct common student errors.

Prerequisite. CHK-390.

IUT-501 3.0 R A E

Goal. IUT evaluation flight.

Requirement. IUT in right seat. Review items covered on IUT-500. IUT in right seat. Brief: exchange of flight controls, conduct of evaluation flight. Conduct: IUT in right seat coaches IP through taxi procedures. IUT conducts normal takeoff and initiates a simulated engine failure at V1 and demonstrates an emergency return. IUT conducts steep turns, high-sink rate recovery, approach to stall series, emergency descent, holding, precision and non-precision approaches, single engine approach, single engine go-around, no-flap/no slat approach and landing, circling, manual spoiler full stop landing, exchange of flight controls at a safe taxi speed. Demonstrate ability to perform all maneuvers in standardized manner, and to recognize and correct common student errors. IUT shall demonstrate the requisite maturity, airmanship, instructional ability, and standardization expected of an instructor pilot. Upon completion, IUT may be designated as a C-9B Instructor Pilot.

Prerequisite. IUT-500. 1000 hours fixed wing pilot time. Designation as a CRM Facilitator. NATOPS open and closed book exams complete.

113. REQUIREMENTS, QUALIFICATIONS, AND DESIGNATIONS

1. Purpose

a. Conduct annual NATOPS and Instrument evaluation flights.

b. Conduct Functional Check Pilot training.

2. Crew Requirement. IP (or TAC designated on the squadron Instrument Board as qualified to conduct Annual Instrument Evaluations)/PUI/CC.

3. Flight Training (4 Flights, 14.0 Hours)

RQD-600 3.0 R A E

Goal. Annual NATOPS Evaluation.

Requirement. Proficiency in the utilization of all aspects of the C-9B. The proficiency expected by the evaluator in this flight shall be commensurate with the experience of the pilot under evaluation.

RQD-601 3.0 R A E (N)

Goal. Annual Instrument Evaluation.

Requirement. The evaluation shall be conducted per the criteria contained within the Instrument Flight Manual. File and fly an instrument flight using all navigation equipment available. Evaluate all phases of instrument flight to include precision and non-precision approaches, partial panel, and instrument holding. Demonstrate proficiency in handling instrument related emergencies.

RQD-602 4.0 R A E

Goal. Familiarize the PUI with the FCF checklist and procedures. Conduct training for designation as a Functional Check Pilot (FCP).

Requirement. PUI in right seat. Per a locally generated syllabus, conduct FCP training with a previously designated FCP. Brief: flight procedures/conduct, FCF requirements, FCF procedures. Conduct: QA/Maintenance brief, ADB review, exterior/interior inspection, engine start, taxi, takeoff, climb, level at altitude, FCF checks, enroute descent, penetration, landing, postflight, debrief QA/Maintenance, sign off FCF card and required maintenance paperwork.

Prerequisite. IUT-501, Designation as a C-9B IP.

RQD-603 4.0 R A E

Goal. Conduct evaluation for designation as a Functional Check Pilot (FCP).

Requirement. PUI in right seat. Per a locally generated syllabus, conduct an evaluation with a previously designated FCP. Brief: flight procedures/conduct, FCF requirements, FCF procedures. Conduct: QA/Maintenance brief, ADB review, exterior/interior inspection, engine start, taxi, takeoff, climb, level at altitude, FCF checks, enroute descent, penetration, landing, postflight, debrief QA/Maintenance, sign off FCF card and required maintenance paperwork.

Prerequisite. RQD-602.

114. SYLLABUS MATRICES

C-9B PILOT														
100 SERIES CORE SKILL INTRODUCTION														
STAGE	**TRNG CODE**	**EVENT DESCRIPTION**	**FLIGHT HOURS**	**SIMULATOR HOURS**	**REFLY INTERVAL**	**DEVICE**	**A/C**	**CONDITIONS**	**PREREQ**	**POI**	**EVALUATION**	**CRP**	**CHAINING**	**EVENT CONVERSION**
SIM/FAM/INST TRAINING														
SFAM/INST	100	SIM INTRO		4.0	*	S								
SFAM/INST	101	SIM FLT CHARACTERISTICS		4.0	*	S			100					
SFAM/INST	102	SIM EP		4.0	*	S			101					
SFAM/INST	103	SIM ABNORMAL		4.0	*	S			102					
SFAM/INST	104	EP REV		4.0	*	S			103					
SIM	105	FBS 1		4.0	*	S			104					
SIM	106	FBS 2		4.0	*	S			105					
SIM	107	FBS 3		4.0	*	S			106					
SIM	108	FBS 4		4.0	*	S			107					
SIM	109	SIM PERIOD 1		4.0	*	S			108					
SIM	110	SIM PERIOD 2		4.0	*	S			109					
SIM	111	SIM PERIOD 3		4.0	*	S			110					
SIM	112	SIM PERIOD 4		4.0	*	S			111					
SIM	113	SIM PERIOD 5		4.0	*	S			112					
SIM	114	SIM PERIOD 6		4.0	*	S			113					
SIM	115	SIM PERIOD 7		4.0	*	S			114					
SIM	116	SIM PERIOD 8		4.0	*	S			115					
SIM	117	DAY ONE		8.0	540	S				R	E			
SIM	118	DAY TWO		8.0	540	S			117	R	E			
SIM	119	DAY THREE		8.0	540	S			118	R	E			
SIM	120	SIM DAY 1		8.0	540	S				R	E			
SIM	121	SIM DAY 2		8.0	540	S			120	R	E			
SIM	122	SIM DAY 3		8.0	540	S			121	R	E			
FAM	130	PREFLIGHT	0.0		*	A	1		SIM COMPLETE					
FAM	131	FAM - NORMAL	3.0		*	A	1		130					
FAM/INST	132	FAM - REV NORMAL	3.0		*	A	1		131	R				
FAM/INST	133	EP REV	3.0		*	A	1		132	R				
NFAM	134	NIGHT FAM/INST	3.0		*	A	1	N	133	R				
FAM	140	REV	3.0		*	A	1	(N)	133	R				
FAM	141	T3P REV	3.0		*	A	1		140,134	R				
CHK	190	T3P CHECKRIDE	3.0		365	A	1		141	R	E			
			21.0	**44.0**								**60.0**		
200 SERIES CORE SKILL BASIC														
REV	200	T2P REVIEW	3.0		*	A	1		190	R		7.0		
CHK	290	T2P CHECKRIDE	3.0		365	A	1		200	R	E	8.0	190	
			6.0	**0.0**								**15.0**		

300 SERIES CORE SKILL ADVANCED													
NAV	300	LONG RANGE NAV	6.0		*	A	1	(N)	290	R	E	4.0		
NAV	310	OVERWATER NAV	8.0		180	A	1	(N)	290	R	E	4.0		
FAM	320	TAC REV	3.0		*	A	1		290	R		5.0		
CHK	390	TAC CHECKRIDE	3.0		365	A	1		300,310, 320	R	E	7.0	290,190	
			20.0	**0.0**								**20.0**		
400 SERIES CORE PLUS														
(NO EVENTS)														
500 SERIES INSTRUCTOR TRAINING														
IUT	500	IUT INTRO	3.0		*	A	1		390	R	E			
IUT	501	IUT EVAL	3.0		*	A	1		500	R	E		190,290,390	
			6.0	**0.0**								**0.0**		
600 SERIES REQUIREMENTS, QUALIFICATIONS, DESIGNATIONS														
RQD	600	NATOPS	3.0		365	A	1			R	E			
RQD	601	INST	3.0		365	A	1	(N)		R	E			
FCF	602	FCF REV	4.0		*	A	1		501	R	E			
FCF	603	FCF EVAL	4.0		*	A	1		602	R	E			
			14.0	**0.0**								**0.0**		

115. PILOT AND COPILOT CURRENCY MATRIX

TAC CURRENCY	**REQUIREMENT TO REGAIN CURRENCY**
OVER 30 DAYS SINCE LAST FLIGHT AS TAC OR COPILOT	FLY ONE FLIGHT (TRAINER OR MISSION)AS A COPILOT PRIOR TO FLYING AS A TAC
OVER 60 DAYS SINCE LAST FLIGHT AS TAC OR COPILOT	FLY ONE TRAINER AS A COPILOT WITH A TAC PRIOR TO FLYING AS A TAC
OVER 90 DAYS SINCE LAST FLIGHT AS TAC OR COPILOT	FLY ONE TRAINER AS A COPILOT WITH A TAC AND A NATOPS CHECK WITH AN IP
OVER 180 DAYS SINCE LAST FLIGHT AS TAC OR COPILOT	COMPLETE THE REFRESH SYLLABUS PER PARAGRAPH 102
OVER 24 MONTHS SINCE LAST FLIGHT AS TAC OR COPILOT*	FLY THE ENTIRE C-9B SYLLABUS BEGINNING WITH THE CORE SKILL INTRODUCTION PHASE*
COPILOT CURRENCY	
OVER 60 DAYS SINCE LAST FLIGHT	FLY ONE TRAINER WITH A TAC
OVER 90 DAYS SINCE LAST FLIGHT	FLY ONE TRAINER WITH AN IP AND A NATOPS CHECK WITH AN IP
OVER 180 DAYS SINCE LAST FLIGHT	COMPLETE THE REFRESH SYLLABUS PER PARAGRAPH 102
OVER 24 MONTHS SINCE LAST FLIGHT	FLY THE ENTIRE C-9B SYLLABUS BEGINNING WITH THE CORE SKILL INTRODUCTION PHASE

* T3P Syllabus waiverable at discretion of squadron commanding officer in order to allow for previously proficient TACs who are returning from a DIFOP tour, to begin at the T2P Syllabus. For currency purposes, a SIM event shall establish the same currency as a flight.

CHAPTER 2

C-9B CREW CHIEF

*** * N O T E * ***

Crew Resource Management (CRM) will be briefed for all flights and aircrew positions

CHAPTER 2

C-9B CREW CHIEF

200. C-9B CORE COMPETENCY

1. Mission. See Chapter 1.

2. Mission Essential Task List (METL). See Chapter 1.

3. Table of Organization. See Chapter 1.

4. Core Capability Statement. See Chapter 1.

5. Mission Essential Task List/Core Skill Matrix. C-9B Crew Chief Core Skills directly support the METL as follows:

MISSION ESSENTIAL TASK	CREW CHIEF CORE SKILL
	FAM
a. Conduct Airlift in the JOA	X
b. Provide Airlift Support to DOD and other Government Agencies	X

6. Designations. The table below delineates T&R events required to be completed to attain initial designations. All stage lectures, briefs, squadron training, prerequisites, and open and closed book NATOPS exams shall be complete and graded prior to completing evaluation flights. Designation letters signed by the commanding officer shall be placed in individual NATOPS and APR jackets.

DESIGNATION	**DESIGNATION REQUIREMENTS**
CREW CHIEF	FAM-390 & CHK-600
CREW CHIEF INSTRUCTOR	500 HOURS AS A C-9B CREW CHIEF, AND IUT-501 COMPLETE
CREW CHIEF NATOPS EVALUATOR	CHK-601

201. PROGRAM OF INSTRUCTION (POI) FOR BASIC CREW CHIEF

A Basic Crew Chief shall be defined as a C-9B Crew Chief who obtains all Crew Chief training aboard the C-9B. A Basic Crew Chief shall fly the Basic POI and will be qualified as C-9B Transport Safety Specialist and shall fly 100 hours as a C-9B TSS prior to commencing this POI. The Crew Chief Under Instruction (CCUI) shall be screened by the squadron Aircrew Screening Board and approved by the commanding officer prior to commencing this POI. A previously qualified Transport Safety Specialist needs only to be approved by the squadron Standardization Board and the squadron commanding officer prior to commencing this POI. All decisions as to POI eligibility rest with the commanding officer.

WEEKS	COURSE/PHASE	ACTIVITY
1	Water Survival/Flight Physiology*	NAWSTP
2-6	C-9B Transportation Safety Specialist Syllabus	VMR-1
As Req'd	Crew Chief Ground Training Syllabus	VMR-1/PROFESSIONAL SCHOOL
7-9	Core Skill Introduction Phase	VMR-1
10-11	Core Skill Basic Phase	VMR-1
12	Core Skill Advanced Phase	VMR-1

* Required only if NAWSTP Swim Qualification is expired.

202. POI FOR REFRESHER CREW CHIEF. The CCUI must have flown in the capacity as a C-9B Crew Chief during the previous two years in order to be eligible for this Refresher POI. The CCUI shall have been recommended by the squadron Standardization Board and approved by the commanding officer prior to commencing this Refresher POI. All decisions as to POI eligibility rest with the commanding officer.

WEEKS	COURSE/PHASE	ACTIVITY
1	Water Survival/Flight Physiology*	NAWSTP
2-3	Core Skill Basic Phase (Refresher Coded events only)	VMR-1
4	Core Skill Advanced Phase (Refresher Coded events only)	VMR-1

* Required only if NAWSTP Swim Qualification is expired.

203. POI FOR INSTRUCTOR UNDER TRAINING AND NATOPS EVALUATOR TRAINING. The CCUI shall have been recommended by the squadron Standardization Board and approved by the commanding officer prior to commencing this POI. All decisions as to POI eligibility rest with the commanding officer.

WEEKS	COURSE/PHASE	ACTIVITY
1	Crew Chief Instructor Training	VMR-1
2	Crew Chief NATOPS Evaluator Training	VMR-1

204. CREW CHIEF GROUND TRAINING

1. General. The following ground training syllabi are intended for Basic Crew Chief Students during initial qualification. Refresher Crew Chiefs are exempt from these ground training syllabi. The Crew Chief Student is required to have been previously designated as a Transport Safety Specialist on the C-9B aircraft prior to assignment to the Crew Chief syllabus. However, the ground training syllabi described below may be conducted concurrently with the TSS syllabus. These ground training syllabi must be complete prior to commencing the CHK-390 Evaluation Flight.

2. Professional School Training

Activity	Location
a. Power Plants and Airframes School	Fort Worth JRB
b. Pratt and Whitney School	MCAS Cherry Point/Norfolk, VA
c. APU Triumph/Raytheon*	Fort Worth JRB/Phoenix AZ
d. Flight Simulator Training	As Prescribed

*When available. If unavailable, APU training may be accomplished at VMR-1.

3. Squadron Ground Training Syllabus

a. General Aircraft Description
b. Required Support Equipment
c. Review of C-9B Phase Examination
d. JT-8D Engine Low Power Turn Qualification
e. C-9B Plane Captain Qualification
f. C-9B APU Qualification
g. C-9B Tow Qualification

h. C-9B Tire/Wheel Qualification
i. LOX Qualification
j. Aircraft Emergency Systems Review
k. Personal Flying Equipment Requirements Review
l. NATOPS Open and Closed Book Examinations

205. FLIGHT SIMULATOR TRAINING. The current prescribed C-9B flight simulator course is designed to familiarize all Crew Chiefs with C-9B normal cockpit procedures, crew coordination, systems operations and limitations, emergency procedures and to introduce instrument flight procedures. Crew Chiefs shall attend the simulator training with two Initial or Refresher pilots. While it is strongly encouraged, attendance at initial simulator training is not mandatory prior to initial designation as a C-9B Crew Chief. However, attendance is mandatory within twelve months of beginning the Crew Chief syllabus. Refresher simulator training is considered sufficient for a Crew Chief's first simulator exposure. However, every effort should be made to send the CCUI or newly-designated Crew Chief to Initial simulator training. Attendance at Refresher simulator training is required prior to re-designation as a Crew Chief but is also not a prerequisite to begin the Refresher Crew Chief syllabus. The Crew Chief simulator refly interval is recommended every 12-18 months, not to exceed 24 months.

206. FLIGHT PERFORMANCE REQUIREMENTS

1. General

a. The time required to qualify a C-9B Crew Chief will vary depending on previous experience and flight time availability. All Crew Chiefs Under Instruction shall have been previously designated as Transportation Safety Specialists in the C-9B. Training may be accomplished aboard either training or operational missions.

b. A Basic Crew Chief shall be defined as a previously designated Transportation Safety Specialist who completes Crew Chief Core Skill Advanced Training and has been subsequently designated as a C-9B Crew Chief. A Refresher Crew Chief shall be defined as a previously designated C-9B Crew Chief who has been assigned to other duty preventing currency in the C-9B aircraft for a period exceeding 12 months. A Crew Chief who has been assigned to other duty preventing currency in the C-9B aircraft for a period exceeding 24 months is not eligible for Refresher Crew Chief training and must complete the entirety of the Crew Chief syllabus (except C-9B Crew Chief Ground Training) prior to redesignation as a Crew Chief.

c. The Crew Chief Instructor qualification is reserved for those Crew Chiefs that demonstrate the maturity, knowledge, and instructional ability to successfully train other CCUI's.

d. All of the Crew Chief training shall be performed in accordance with this chapter, OPNAVINST 3710.7, current squadron directives, and NAVAIR's 01-C9BAAA-1, 01-C9BAAA-9, and 01-1B-50.

e. Flights annotated with an "N" shall be flown at night with the intent that these night flights will be flown at least 30 minutes after official sunset. Flights annotated with an "(N)" may be flown during day or night.

2. Syllabus Assignment. Basic Crew Chiefs shall complete all flights up to and including Core Skill Advanced Training prior to designation as Crew Chief. All Refresher Crew Chiefs shall complete all flights marked with an R in the POI column for the Training Syllabus assigned (i.e. IUT, NATOPS Evaluator) in the syllabus matrix.

3. Aircrew Evaluation (Check) Flights. Open and Closed Book NATOPS Exams shall be completed and graded prior to flying all NATOPS evaluation flights. An ATF shall be completed for all initial event completions and E-coded events. All Crew Chiefs are required to have a NATOPS evaluation form completed annually upon completion of one of the following:

a. Completion of Core Skill Advanced Training (FAM-390).

b. Completion of Crew Chief Instructor Training, or Crew Chief NATOPS Evaluator Training (IUT 501, IUT 601).

c. Completion of an Annual NATOPS evaluation (CHK-600).

207. CORE SKILL INTRODUCTION TRAINING

1. Familiarization

a. Purpose. Familiarize the CCUI with the C-9B aircraft. Instruction will emphasize adherence to NATOPS procedures, operation of aircraft systems, and aircraft servicing.

b. Crew Requirement. P/CP/CCI/CCUI

c. Flight Training (7 Flights, 21.0 Hours)

FAM-l00 3.0 R A

Goal. Introduce auxiliary power unit (APU) airborne use, daily/postflight inspection, servicing and turnaround of engine system.

Requirement. CCUI shall review NATOPS procedures and applicable maintenance manuals associated with the auxiliary power unit (APU), daily/postflight inspection, servicing and turnaround of engine system.

Prerequisite. Previous designation as a C-9B Transportation Safety Specialist.

FAM-110 3.0 R A

Goal. Introduce emergency procedures (all types). Requirement. CCUI is required to memorize all bold face emergency procedure items in the C-9B NATOPS Flight Manual, and C-9B operation limitations.

Prerequisite. 100.

FAM-120 3.0 A (N)

Goal. Review all emergency procedures and introduce AC and DC electrical systems and fuel systems.

Requirement. CCUI shall review NATOPS procedures and applicable maintenance manuals associated with the AC and DC electrical systems and fuel systems.

Prerequisite. 110.

FAM-130 3.0 A (N)

Goal. Review all emergency procedures and introduce hydraulics system and landing gear.

Requirement. CCUI shall review NATOPS procedures and applicable maintenance manuals associated with the hydraulics systems and fuel systems.

Prerequisite. 120.

FAM-140 3.0 A (N)

Goal. Review all emergency procedures and introduce flight control system and pneumatic system.

Requirement. CCUI shall review NATOPS procedures and applicable maintenance manuals associated with the flight control system and pneumatic system.

Prerequisite. 130.

FAM-150 3.0 A (N)

Goal. Review all emergency procedures and introduce fire warning/protection and oxygen system.

Requirement. CCUI shall review NATOPS procedures and applicable maintenance manuals associated with the fire warning/protection and oxygen system.

Prerequisite. 140.

FAM-160 3.0 E A

Goal: Evaluate CCUI progress in the Crew Chief syllabus.

Requirement. CCUI shall demonstrate a high degree of proficiency and knowledge of the A/C systems covered in all previous instruction.

Prerequisite. 150.

208. CORE SKILL BASIC TRAINING

1. Familiarization

a. Purpose. Further instruct the CCUI on the C-9B aircraft and the duties and responsibilities of the C-9B crew chief.

b. Crew Requirement. P/CP/CCI/CCUI

c. Flight Training (5 Flights, 30.0 Hours)

FAM-200 6.0 R A N

Goal. Review emergency procedures (all types) and introduce night procedures.

Requirement. CCUI is required to review all bold face emergency procedure items in the C-9B NATOPS Flight Manual, and demonstrate knowledge of C-9B operation limitations. Additionally, this sortie shall be conducted at night in order to introduce night operations.

Prerequisite. 160.

FAM-210 6.0 R A N

Goal. Review AC/DC Electrical systems, fuel system, and hydraulic system. Review night operations.

Requirement. CCUI is required to memorize all bold face emergency procedure items in the C-9B NATOPS Flight Manual, demonstrate knowledge of C-9B operation limitations associated with the AC/DC electrical systems, fuel system and hydraulic system. Additionally, this sortie shall be conducted at night in order to review night operations.

Prerequisite: 200.

FAM-220 6.0 R A (N)

Goal. Review landing gear system, flight control system, and pneumatic system.

Requirement. CCUI is required to memorize all bold face emergency procedure items in the C-9B NATOPS Flight Manual, and know C-9B operation limitations associated with the flight control system and pneumatic system.

Prerequisite. 210.

FAM-230 6.0 R A (N)

Goal. Review Fire Warning/Protection system and oxygen system.

Requirement. CCUI is required to memorize all bold face emergency procedure items in the C-9B NATOPS Flight Manual, and know C-9B operation limitations associated with the Fire warning/protection system and oxygen system.

Prerequisite. 220.

FAM-240 6.0 R E A

Goal. Evaluate CCUI proficiency and knowledge of the 100 and 200 series sorties.

Requirement. Demonstrate the ability to serve as the Crew Chief during both normal and emergency situations. Emphasis shall be placed upon cockpit checklist challenge-response technique and interaction with the pilot and copilot.

Prerequisite. 230.

209. CORE SKILL ADVANCED TRAINING

1. Purpose. Review all 100 and 200 series sorties leading to a NATOPS check.

2. Crew Requirement. P/CP/CCI/CCUI

3. Flight Training (3 Flights, 27.0 Hours)

FAM-300 3.0 A (N)

Goal. Review all 100 series code requirements in preparation for the Crew Chief NATOPS evaluation flight.

Requirement. Demonstrate the ability to serve as the Crew Chief during both normal and emergency situations. Emphasis shall be placed upon cockpit checklist challenge-response technique and interaction with the pilot and copilot.

Prerequisite. 240.

FAM-310 3.0 R A (N)

Goal. Review all 200 series code requirements in preparation for the Crew Chief NATOPS evaluation flight.

Requirement. Demonstrate the ability to serve as the Crew Chief during both normal and emergency situations. Emphasis shall be placed upon cockpit checklist challenge-response technique and interaction with the pilot and copilot.

Prerequisite. 300.

FAM-320 6.0 A (N)

Goal: CCUI will be instructed on procedures required of a Crew Chief on a transoceanic flight.

Requirement. Introduce and review procedures for overwater/international flights.

Prerequisite: 240.

FAM-390 3.0 R A (N)

Goal: NATOPS Check Flight.

Requirement. CCUI acting in capacity of Crew Chief shall demonstrate the knowledge and ability required to function as a C-9B Crew Chief.

Prerequisite: 310, 320.

210. CREW CHIEF INSTRUCTOR TRAINING

1. Instructor Under Training (IUT)

a. Purpose. To qualify a Crew Chief as a Crew Chief Instructor/Assistant NATOPS Instructor.

b. Ground Training. In addition to basic Crew Chief requirements, the IUT will have the following schools and Certifications.

(1) Crew Resource Management (CRM) Facilitator Course.

(2) Auxiliary Power Unit Instructor Certification.

(3) Engine Low-power Run-up Instructor Certification.

c. Crew Requirement. P/CP/CCE/CCIUI/CCUI

d. Flight Training (2 Flights, 6.0 Hours)

IUT-500 3.0 R E A

Goal. The student Crew Chief Instructor shall observe a Crew Chief Evaluator (CCE) train a Crew Chief Under Instruction (CCUI).

Requirement. The student Crew Chief instructor shall observe a CCE train a CCUI on a syllabus flight. The CCE will emphasize the CCUI's accuracy of aircraft systems and crew coordination.

Prerequisite. 310.

IUT-501 3.0 R E A

Goal. Crew Chief Instructor evaluation flight.

Requirement. The student Crew Chief Instructor will demonstrate his ability to instruct a CCUI while under the supervision of a CCE. The student Crew Chief Instructor will perform all duties required of a Crew Chief Instructor on the check flight.

Prerequisite. 500.

211. REQUIREMENTS, QUALIFICATIONS AND DESIGNATIONS

1. Purpose. Fully qualify a CCUI for designation as a C-9 crew chief.

2. General. Upon successful completion of this phase of instruction CCUI may be designated as a C-9 Crew Chief.

3. Crew Requirement. P/CP/CCI/CCUI

4. Flight Training (1 Sortie, 4.0 Hours)

5. NATOPS Evaluation Flight

CHK-600 3.0 R E A

Goal. NATOPS check flight.

Requirement. CCUI acting in capacity of crew chief shall demonstrate the knowledge and ability required to function as a C-9B Crew Chief.

Prerequisite. FAM-310 and NATOPS Open and Closed Book Examinations.

6. Crew Chief NATOPS Evaluator Under Training

a. Purpose. To qualify a Crew Chief Instructor as a Crew Chief NATOPS Evaluator.

b. Crew Requirement. P/CP/CCE/CCEUI/CCUI

c. Flight Training (1 Flight, 4.0 Hours)

CHK-601 4.0 R E A

Goal. Qualify a Crew Chief as a NATOPS Evaluator on the C-9B aircraft.

Requirement. The Crew Chief Instructor shall be evaluated by a Crew Chief NATOPS Evaluator while instructing a student Crew Chief. The Crew Chief being evaluated will display the maturity, integrity, and knowledge of the aircraft required to conduct a NATOPS evaluation.

Prerequisite. 501.

7. Functional Check Flight (FCF). Use the code below for logging FCF events:

RQD-602 AS REQUIRED R E

Crew Requirement. P/CP/CC.

212. SYLLABUS MATRIX

C-9B CREW CHIEF														
STAGE	TRNG CODE	EVENT DESCRIPTION	FLIGHT HOURS	SIMULATOR HOURS	REFLY INTERVAL	DEVICE	A/C	CONDITIONS	PREREQ	POI	EVALUATION	CRP	CHAINING	EVENT CONVERSION
100 SERIES CORE SKILL INTRODUCTION														
FAM	100	APU/SERVICING	3.0		*	A	1			R		5.0		
FAM	110	EMER PROC	3.0		*	A	1		100	R		5.0		
FAM	120	A/C D/C POWER	3.0		*	A	1	(N)	110			5.0		
FAM	130	HYD/LANDING GEAR	3.0		*	A	1	(N)	120			5.0		
FAM	140	FLIGHT CONT/PNU	3.0		*	A	1	(N)	130			5.0		
FAM	150	FIRE/OXYGEN	3.0		*	A	1	(N)	140			5.0		
FAM	160	EVAL	3.0		*	A	1		150		E	5.0		
			21.0									**35.0**		
200 SERIES CORE SKILL BASIC														
FAM	200	EMER PROC NIGHT	6.0		*	A	1	N	160	R		3.0		
FAM	210	A/C D/C POWER NIGHT	6.0		*	A	1	N	200	R		3.0		
FAM	220	REV LANDING GEAR	6.0		*	A	1	(N)	210	R		3.0		
FAM	230	REV FIRE/OXYGEN	6.0		*	A	1	(N)	220	R		3.0		
FAM	240	100/200 EVAL	6.0		*	A	1		230	R	E	3.0		
			30.0	**0.0**								**15.0**		
300 SERIES CORE SKILL ADVANCED														
FAM	300	REV 100	3.0		*	A	1	(N)	240			5.0		
FAM	310	REV 200	3.0		*	A	1	(N)	300	R		5.0		
FAM	320	OVERWATER	6.0		365	A	1	(N)		R		5.0		
FAM	390	NATOPS CHECK	3.0		365	A	1	(N)	310, 320	R		5.0		
			15.0	**0.0**								**20.0**		
400 SERIES CORE PLUS														
(NO EVENTS)														
500 SERIES INSTRUCTOR TRAINING														
IUT	500	CCI REV	3.0		*	A	1		310	R	E	0.0		
IUT	501	CCI EVAL	3.0		*	A	1		500	R	E	0.0		
			6.0	**0.0**								**0.0**		
600 SERIES REQUIREMENTS, QUALIFICATIONS, DESIGNATIONS														
CHK	600	NATOPS	3.0		365	A	1		310	R	E	0.0		
CHK	601	NATOPS EVALUATOR	4.0		365	A	1		501	R	E	0.0	600	
RQD	602	FCF	3.0		*	A	1					0.0		
			10.0	**0.0**								**0.0**		

CHAPTER 3

C-9B LOADMASTER

*** * N O T E * ***

Crew Resource Management (CRM) will be briefed for all flights and aircrew positions.

C-9B LOADMASTER

300. C-9B CORE COMPETENCY

1. Mission. See Chapter 1.

2. Mission Essential Task List (METL). See Chapter 1.

3. Table of Organization. See Chapter 1.

4. Core Capability Statement. See Chapter 1.

5. Mission Essential Task List/Core Skill Matrix. Loadmaster Core Skills directly support the METL as follows:

MISSION ESSENTIAL TASK	CORE SKILL				CORE +
	FAM	CPL	VIP	NATOPS CHK	CPL
a. Conduct Airlift in the JOA	X	X	X	X	X
b. Provide Airlift Support to DOD and other Government Agencies	X	X	X	X	X

6. Qualifications And Designations. The tables below delineate T&R events required to be completed to attain initial qualifications and designations. All stage lectures, briefs, squadron training, prerequisites, and open and closed book NATOPS exams shall be complete and graded prior to completing evaluation flights. Qualification and designation letters signed by the commanding officer shall be placed in individual NATOPS and APR jackets.

QUALIFICATION	**INITIAL EVENT QUALIFICATION REQUIREMENTS**
LOADMASTER	390
LOADMASTER MAXIMUM CARGO	400, 401

DESIGNATION	**DESIGNATION REQUIREMENTS**
LOADMASTER	LOADMASTER CORE SKILL INTRODUCTION, BASIC, AND ADVANCED COMPLETE, CHK-390
LOADMASTER INSTRUCTOR	500 HOURS* AS A C-9B LOADMASTER, AND IUT 500 COMPLETE
LOADMASTER NATOPS EVALUATOR	LOADMASTER INSTRUCTOR, AND CHK-601 COMPLETE

* Hours waiverable by Squadron Commander based upon demonstrated maturity and experience.

301. PROGRAM OF INSTRUCTION (POI) FOR BASIC AND CONVERSION LOADMASTER

1. A Basic Loadmaster shall be defined as a C-9B Loadmaster who obtains all Loadmaster training aboard the C-9B and was not previously qualified as a KC-130 Loadmaster (MOS 7382). A Conversion Loadmaster shall be defined as a C-9B Loadmaster who was previously qualified as a KC-130 Loadmaster (MOS 7382). Both Basic and Conversion Loadmasters shall be qualified as C-9B Transport Safety Specialists and shall fly 100 hours as C-9B TSS prior to commencing this POI. The Loadmaster Under Instruction shall be screened by the squadron

Aircrew Screening Board and approved by the commanding officer prior to commencing this POI. A previously qualified Transport Safety Specialist needs only to be approved by the squadron Standardization Board and the squadron commanding officer prior to commencing this POI. All decisions as to POI eligibility rest with the commanding officer.

2. A Basic Loadmaster shall be considered qualified to serve as the Loadmaster aboard both CONUS and OCONUS missions and shall be authorized to serve aboard missions carrying Aircrew Survival Equipment (flares), however no other additional hazardous material shall be allowed aboard. A Conversion Loadmaster shall be considered qualified to serve as the Loadmaster aboard dedicated hazardous cargo missions (due to previous training with hazardous cargo in the KC-130).

3. The Loadmaster must be complete with the Core Plus Phase prior to acting as the Loadmaster aboard missions carrying maximum cargo (SECOs E, G, or H).

WEEKS	COURSE/PHASE	ACTIVITY
1	Water Survival/Flight Physiology	NAWSTP
2-3	Loadmaster Course	CLFSW, Forth Worth JRB
4-16	Core Skill Introduction Phase	VMR-1
17-18	Core Skill Basic Phase	VMR-1
19	Core Skill Advanced Phase*	VMR-1
20	Core Plus Phase**	VMR-1

* The Core Skill Advanced Phase shall only be instructed by a Conversion Loadmaster Instructor.

** The Loadmaster shall be Core Plus Phase complete prior to acting as the Loadmaster aboard maximum cargo missions (SECOs E, G, or H).

302. POI FOR REFRESHER LOADMASTER. The Loadmaster Under Instruction must have flown in the capacity as a C-9B Loadmaster during the previous two years in order to be eligible for this refresher POI. The Loadmaster Under Instruction shall have been recommended by the squadron Standardization Board and approved by the commanding officer prior to commencing this Refresher POI. All decisions as to POI eligibility rest with the commanding officer.

WEEKS	COURSE/PHASE	ACTIVITY
1	Water Survival/Flight Physiology***	NAWSTP
2-6	Core Skill Introduction, Basic, and Advanced Phases (Core Plus, IUT, and NATOPS Evaluator only as required) (Refresher Coded events only)	VMR-1

*** Required only if NAWSTP Swim Qualification is expired

303. POI FOR INSTRUCTOR AND NATOPS EVALUATOR TRAINING. The Loadmaster Under Instruction shall have been recommended by the squadron Standardization Board and approved by the commanding officer prior to commencing this POI. All decisions as to POI eligibility rest with the commanding officer. Additionally, the NATOPS Evaluator qualification is reserved for those Loadmasters who were previously qualified as a KC-130 Loadmaster (MOS 7382).

WEEKS	COURSE/PHASE	ACTIVITY
1	Loadmaster Instructor Training	VMR-1
2	Loadmaster NATOPS Evaluator Training	VMR-1

304. SQUADRON LEVEL GROUND TRAINING

1. General

(a) The following ground training syllabus is intended as squadron-level training for Basic Loadmaster Students during initial qualification. Refresher Loadmasters are exempt from this ground training syllabus. The Loadmaster Student is required to have been previously designated as a Transport Safety Specialist on the C-9B aircraft prior to commencing this ground training.

(b) The Loadmaster student may commence this ground training syllabus either before or after attending the C-9B Loadmaster Course at Fort Worth JRB. This ground training may be conducted concurrently with the flight training syllabus. Additionally, the Loadmaster Student is permitted to commence the flight training syllabus prior to attending the Loadmaster Course at Fort Worth JRB. However, the ground training syllabus and the Loadmaster Course at Fort Worth JRB must be complete prior to the NATOPS-390 flight.

2. Squadron Ground Training Syllabus

(a) Week 1

(1) General Aircraft Description
(2) Aircraft Systems
(3) Aircraft Emergency Equipment and Systems
(4) Emergency Procedures
(5) Loadmaster Equipment
(6) Weight and Balance Theory and Formulas.
(7) Weight and Balance Forms (DD Form 365).
(8) Aircraft Limitations Passenger/Cargo Manifests.
(9) Associated Paperwork.
(10) Weight and Balance Form Computation utilizing Moment.
(11) Weight and Balance Form Computation utilizing Load Adjuster.
(12) Procedures for arranging crew billeting and ground transportation.

(b) Week 2

(1) Cargo Restraint Equipment
(2) Weight and Balance Planning
(3) Personal Flying Equipment Requirements
(4) Phase Examinations
(5) Cargo Limitations and Dimensions
(6) Dimensions of Main Cabin Area
(7) Dimensions of Cargo Doors
(8) Dimensions of Cargo Compartments
(9) Weight Restrictions for Decking and Pallets
(10) Loadmaster Equipment and Responsibilities listed in NATOPS Manual.
(11) Written Exam on Material in the Cargo Loading Manual (NAVAIR 1-C9BAAA-9-9).

(c) Week 3

(1) C-9 Configurations.
(2) Loadex 1 SECO C.

(3) Loadex 2 SECO G.
(4) Loadex 3 Special Aircraft Configurations.
(5) Aircraft Mission.
(6) Preflight Coordination with Lift Coordinator.
(7) Crew Billeting and Ground Transportation Requirements.
(8) NATOPS Open and Closed Book Examinations.

305. FLIGHT PERFORMANCE REQUIREMENTS

1. General

a. The time required to qualify a C-9B loadmaster will vary depending on previous experience and flight time availability. All Loadmasters Under Instruction shall have been previously designated as Transportation Safety Specialists in the C-9B. Training should be accomplished in conjunction with operational flights, however it is acceptable to train aboard dedicated training missions through the use of self-built palletized cargo. Every effort should be made to conduct VIP training codes aboard actual VIP Code missions. However, it is permissible to conduct simulated VIP missions as required in order to continue student Loadmasters through the syllabus. Hazardous Cargo may be simulated for the Core Skill Advanced Phase. Maximum Cargo (SECO's E, G, or H) may be simulated for the Core Plus Phase during a ground training exercise.

b. A Refresher Loadmaster shall be defined as a previously designated C-9B Loadmaster who has been assigned to other duty preventing currency in the C-9B aircraft for a period exceeding 12 months. A Loadmaster who has been assigned to other duty preventing currency in the C-9B aircraft for a period exceeding 24 months is not eligible for Refresher Loadmaster training and must complete the entirety of the Loadmaster Core Skill Introduction, Basic, and Advanced Phases, as well as a CHK 390 prior to redesignation as a Loadmaster.

c. The Loadmaster Instructor qualification is reserved for those Loadmasters that demonstrate the maturity, knowledge, and instructional ability to successfully complete the training. Only Conversion Loadmasters (previously designated KC-130 Loadmasters- MOS 7382) shall be assigned to instruct Loadmaster Core Skill Advanced Training (Hazardous Cargo), and Loadmaster NATOPS Evaluator Training.

d. All of the Loadmaster training shall be performed in accordance with this T&R chapter, OPNAVINST 3710.7, current squadron directives, and NAVAIR's 01-C9BAAA-1, 01-C9BAAA-9, 01-1B-50, and MCO P4030.19.

2. Syllabus Assignment. Both Basic and Conversion Loadmasters shall complete all flights in Core Skill Introduction, Basic, and Advanced Phases, as well as CHK 390 prior to Designation as a Loadmaster. All Refresher Loadmasters will complete all flights marked with an R in the POI column, except that the refresh events for Core Plus, IUT, and NATOPS Evaluator are required only for individuals assigned to refresh in those areas. An E in the Evaluation column denotes an Evaluation Flight.

3. Re-fly Interval. The syllabus matrix depicts refly interval and Flight Update Chaining.

4. Aircrew Evaluation (Check) Flights. Open and Closed Book NATOPS Exams shall be completed and graded prior to flying a NATOPS evaluation. All Loadmasters are required to have an ATF completed annually upon completion of one of the following:

a. CHK 390 (Loadmaster Evaluation Flight). NATOPS evaluation form required also.

b. CHK 600 (Annual NATOPS Evaluation).

c. CPL 210 (Annual Overwater Flight).

d. All E coded events.

306. CORE SKILL INTRODUCTION TRAINING

1. Familiarization

a. Purpose. Familiarize the Loadmaster Under Instruction (LMUI) with the C-9B aircraft and the duties and responsibilities of the Loadmaster during all emergency situations.

b. Crew Requirement. P/CP/CC/LMI/LMUI/TSS

c. Flight Training (1 Flight, 4.0 Hours)

FAM-100	4.0	R	A

Goal: Introduce the LMUI to the responses/action required during each airborne/ground emergency.

Requirement. The LMUI will demonstrate the proper responses/ actions to the following emergency situations: rapid decompression/emergency descent, fuselage fire, smoke and fume elimination, in-flight door open warning, crash landing and ditching procedures. The LMUI will demonstrate the use/refilling of walk around oxygen bottles and the use/location of all emergency equipment. The LMUI will "don" the restraining harness and demonstrate the procedure for securing the restraining harness.

Prerequisite: Previous designation as a C-9B Transportation Safety Specialist.

2. Cargo and Passenger Loading

a. Purpose. Instruct and qualify the LMUI in the performance of the duties required to load cargo and passengers. Emphasize adherence to NATOPS procedures, operation of aircraft equipment and all duties and procedures required of a qualified C-9B Loadmaster.

b. Crew Requirement. P/CP/CC/LMI/LMUI/TSS

c. Flight Training (8 Flights, 32.0 Hours)

CPL-110	4.0	A	(N)

Goal. Introduce the LMUI to passenger/baggage loading procedures and Weight and Balance Form computation. Additionally, the LMUI will be instructed on the proper pre-flight and post flight procedures.

Requirement. LMUI observes and assists a qualified loadmaster during pre-flight, postflight, and passenger/baggage loading and offloading, to include the directing of ground loading

equipment around the aircraft. LMUI will compute a secondary Weight and Balance Form. Emphasis will be on pre-flight of aircraft, in-flight responsibilities and aircraft post flight. The LMI will introduce the procedures for preflight coordination with the Lift Coordinator.

Prerequisite: FAM-100. However this code may be flown simultaneously with a FAM-100 if the first training opportunity consists of a cargo mission.

CPL-111 4.0 R A (N)

Goal. Continuation of passenger and baggage loading procedures and Weight and Balance Form computation.

Requirement. LMUI will demonstrate a thorough knowledge of all aircraft oxygen systems, to include; first aid oxygen, location of masks, types of masks, and requirements for availability of oxygen. Additionally, the LMUI will stage baggage according to destination to expedite off-load. LMUI will ensure the accuracy of all passenger manifests and record all "LFR" information. The LMUI will demonstrate ability to conduct preflight coordination with the Lift Coordinator. Review of CPL-110.

Prerequisite: CPL-110.

CPL-112 4.0 R A (N)

Goal. The LMUI will perform all duties of C-9B Loadmaster.

Requirement. The LMUI will demonstrate a thorough knowledge of the aircraft lighting systems and lavatory and galley operation, to include restrictions and circuit breaker locations. Additionally, the LMUI must complete the primary Weight and Balance Form, prior to scheduled take-off, on a flight consisting of multiple enroute stops emphasizing accurate passenger manifests, Weight and Balance Form, associated paperwork, pre-flight, in-flight and post flight responsibilities, and meal handling procedures.

Prerequisite: CPL-111

CPL-113 4.0 R A (N)

Goal. LMUI observes and assists a qualified loadmaster during flight with mixed cargo and passengers.

Requirement. Flight will consist of multiple enroute stops emphasizing the reconfiguration of the aircraft to the "SECO C" and "SECO G" configuration, utilizing the "floor decal" locations. The LMUI will demonstrate a thorough knowledge of the operation of the cargo door, cargo door restrictions, and associated hydraulic systems (to include circuit breaker locations). Additionally, the LMUI will properly install the door sills. The LMUI will compute a secondary Weight and Balance Form.

Prerequisite: CPL-112.

CPL-114 4.0 R A (N)

Goal. LMUI observes and assists a qualified loadmaster during flight with mixed cargo and passengers.

Requirement. Flight will consist of multiple enroute stops emphasizing aircraft dimensions, compartment weight restrictions, and restraint criteria. The LMUI will be instructed in the expeditious off-load of baggage. Additionally, the LMUI will observe and assist with the staging and proper loading of cargo, the use of tie down equipment (to include the cargo barrier net), safety considerations, and accurate passenger and cargo manifests.

Prerequisite. CPL-113.

CPL-115 4.0 R A (N)

Goal. The LMUI will observe and assist a qualified loadmaster during the loading and the unloading of palletized cargo.

Requirement. Flight will consist of multiple enroute stops. Emphasis will be placed on the procedures for loading and unloading palletized cargo. The use of established loading signals will be utilized during all loading and unloading evolutions. The LMUI will compute the primary Weight and Balance Form and will determine the required tie down restraint. Safety of aircraft and personnel will be the primary consideration.

Prerequisite. CPL-114.

CPL-116 4.0 R A (N)

Goal. Review of flights CPL-113 through CPL-115.

Requirement. Flight will consist of an overnight stop. Emphasis will be placed upon review of operation of the cargo door, cargo door restrictions, and associated hydraulic systems. The LMUI will demonstrate the loading of baggage and will compute the primary Weight and Balance Form. Additionally, LMUI will demonstrate knowledge of the process of arranging billeting and transportation for the crew from the aircraft to billeting and return the next morning.

Prerequisite. FAM-100 THROUGH CPL-115.

CPL-117 4.0 R A (N)

Goal. Progress check. LMUI performs all duties required of a C-9B loadmaster.

Requirement. Flight will consist of multiple enroute stops. Emphasis will be placed on Weight and Balance Form computation (prior to scheduled take-off), aircraft reconfiguration, appropriate tie down procedures, required tie down restraint; and safety in the use of all loading equipment. The LUI will be observed/evaluated on the directing of forklift operators and ground loading equipment around the aircraft.

Prerequisite. CPL-116.

3. VIP Procedures

a. Purpose. Qualify a LMUI in the proper procedures when carrying passengers who are VIP Code 7 or above.

b. Crew Requirement. P/CP/CC/LMI/LMUI/TSS

c. Flight Training (3 Sorties, 12.0 Hours)

VIP-120 4.0 A (N)

Goal. The LMUI will observe a qualified loadmaster on a flight carrying a passenger that is VIP Code 7 or above.

Requirement. Emphasize passenger comfort, VIP baggage handling, configuration of the aircraft, and the installation of the appropriate VIP placard. Weight and Balance Form computation will be accomplished by the Loadmaster Instructor (LMI).

Prerequisite. FAM-100. However this Code may be flown simultaneously with a FAM-100 if the first training opportunity consists of a VIP mission.

VIP-121 4.0 A (N)

Goal. The LMUI will assist a qualified loadmaster on a flight carrying a passenger who is a VIP Code 7 or above.

Requirement. Emphasize passenger comfort, VIP baggage handling, and VIP configuration, to include intermediate stop clean-up procedures. The LMI will complete the Weight and Balance Form for the aircraft.

Prerequisite. VIP-120.

VIP-122 4.0 R A (N)

Goal. Progress check.

Requirements. The LMUI will perform all duties of a loadmaster on a flight carrying a passenger who is a VIP Code 7 or above. Emphasize passenger comfort, VIP baggage handling, aircraft preparation, and an accurate Weight and Balance Form.

Prerequisite. VIP-121.

307. CORE SKILL BASIC TRAINING

1. Overwater/International Procedures

a. Purpose. Qualify the Loadmaster in overwater/international procedures with cargo and/or passengers aboard the aircraft.

b. Crew Requirement. P/CP/CC/LMI/LMUI/TSS

c. Flight Training (3 Sorties, 18.0 Hours)

CPL 200 6.0 A (N)

Goal. The LMUI observes and assists a LMI during an overwater flight with passengers and/or cargo aboard.

Requirement. The LMUI will observe and assist the LMI during pre-flight, in-flight, and post-flight duties. Emphasis will be placed on maximum passenger loads for overwater/ overland flights, proper baggage handling, accurate passenger manifests, Weight and Balance Form, LFR, required Customs and Agriculture procedures, appropriate emergency equipment and required briefings. Additionally, LMUI will assist LMI in arranging billeting and ground transportation for an OCONUS location.

Prerequisite. FAM-100.

CPL-201 6.0 A (N)

Goal. Core Skill Basic Training Check flight. The LMUI will perform all duties required of a Loadmaster on an overwater flight with passengers and/or cargo aboard while under the supervision of a Loadmaster Instructor. Successful accomplishment of this flight will result in the LMUI being designated as Core Skill Basic Training Complete on the C-9B aircraft.

Requirement. The LMUI will maintain accurate Weight and Balance Form, Customs/Agriculture Inspection Documents, passenger manifests and leg load information. The LMUI will conduct the appropriate pre-flight, in-flight and post flight duties.

Prerequisite. CPL-200.

CPL 210 6.0 R A (N)

Goal. Annual Refresher Over water flight code for a Loadmaster who is already Core Skill Basic Training Complete. This flight code is required for initial completion of Core Skill Basic Training.

Requirement. The LMUI will maintain accurate Weight and Balance Form, Customs/Agriculture Inspection Documents, passenger manifests and leg load information. The LMUI will conduct the appropriate pre-flight, in-flight and post flight duties.

Prerequisite. CPL-201, complete with Core Skill Basic Training.

308. CORE SKILL ADVANCED TRAINING

1. Hazardous Cargo Familiarization

a. Purpose: Familiarize and qualify the Basic and Refresher loadmaster in the proper procedures when carrying hazardous cargo.

b. Crew Requirement. P/CP/CC/LME/LMUI/TSS

c. Ground Training. Due to the fact that KC-130 Loadmasters (CONVERSION Loadmasters) have had extensive training and experience when dealing with hazardous materials, the CONVERSION LMUI is considered complete with hazardous material ground training and can serve on any Hazardous Material Mission. After completion of Core Skill Advanced Training, the BASIC LMUI will be authorized to serve aboard missions carrying Aircrew Survival Equipment (Signal Flares) only. The BASIC LMUI must be instructed by a CONVERSION LMI or Evaluator.

d. Flight Training (1 Sortie, 3.0 Hours)

FAM-300	3.0	R	A	(N)

Goal. Core Skill Advanced Training Check. To give a BASIC LMUI the required training that is needed to properly read and identify all information on a Shippers Declaration of Hazardous Goods Form, and be able to find all applicable information on that form in the MCO P4030.19 Hazardous Material Manual. Successful completion of this flight will result in the LMUI being designated as a Core Skill Advanced Training Complete on the C-9B aircraft.

Requirement. Emphasize total compliance with MCO P4030.19 to include all required forms, any deviations and/or waivers, and Pilot In Command required briefings. The LMUI will compute the Weight and Balance Form and will also complete and file all flight related paperwork.

Prerequisite. Completion of the C-9B Loadmaster School at Fort Worth JRB. FAM-100.

309. NATOPS EVALUATION FLIGHT

a. Purpose. Qualify a LMUI as a Loadmaster on the C-9B aircraft. Upon successful completion of this flight, the LMUI will be considered Core Skill Introduction, Core Skill Basic, and Core Skill Advanced Training Complete.

b. Crew Requirement. P/CP/CC/LMI/LMUI/TSS

c. Flight Training (1 Sortie, 4.0 Hours)

CHK-390	4.0	R E	A	

Goal. Evaluation flight.

Requirement. The LMUI will successfully complete a flight evaluation administered by a designated NATOPS Loadmaster Instructor. All phases of Core Skill Introduction, Core Skill Basic, and Core Skill Advanced Training will be reviewed with emphasis on NATOPS procedures, squadron procedures and accurate and timely Weight and Balance Form computation. All emergency procedures will be conducted or simulated per current NATOPS directives. Egress procedures, with and without passengers, will be conducted and/or simulated. The LMUI must install, or have previously installed, the "cargo barrier net".

Prerequisite. 117, 122, 210, 300, Completion of the C-9B Loadmaster School at Fort Worth JRB and completion of Squadron Ground Training Syllabus.

310. CORE PLUS TRAINING

1. Maximum Cargo Procedures

a. Purpose. Qualify the Loadmaster in procedures when carrying maximum cargo (SECOs E, F or H).

b. Crew Requirement. P/CP/CC/LME/LMUI/TSS

c. Flight Training (2 Sorties, 10.0 Hours)

CPL-400 5.0 A (N)

Goal. The LMUI will observe and assist a Loadmaster Evaluator on a flight carrying maximum cargo, (SECO's E, G or H).

Requirement. Emphasize the reconfiguration of the aircraft to SECO E, F or H. The LMUI will compute the primary Weight and Balance Form. The loading of the aircraft must be accomplished to allow the minimum amount of interference at intermediate stops with due consideration to center of gravity limits. The LMUI will ensure the cargo is properly restrained to the pallet and that no pallet exceeds the appropriate "G" factor limitation. The LMUI will install the "barrier net".

Prerequisite. CPL-114.

CPL-401 5.0 R A (N)

Goal. The LMUI will perform the duties of a Loadmaster on a flight carrying maximum cargo, (SECO's E, G, or H) under the supervision of a Loadmaster Evaluator.

Requirements. Emphasize reconfiguration of the aircraft to the required SECO configuration. The correct placement of all pallet restraints will be verified by the LMUI. The LMUI will compute the Weight and Balance Form with consideration to enroute stops and center of gravity limitations. The LMUI will stage all cargo and load the aircraft with the safety of the aircraft, the safety of loading personnel and control of all loading equipment as the primary consideration.

Prerequisite. 400.

311. LOADMASTER INSTRUCTOR TRAINING

1. Instructor Under Training (IUT)

a. Purpose. Qualify a Loadmaster as a Loadmaster Instructor.

b. Ground Training. C-9B Loadmaster School at Ft. Worth JRB.

c. Crew Requirement. P/CP/CC/LMI(or LME)/SLI/LMUI/TSS

d. Flight Training (1 Sortie, 3.0 Hours)

IUT-500 3.0 R E A

Goal. IUT Check Flight. Qualify a Student Loadmaster Instructor (SLI) as a Loadmaster Instructor on the C-9B. The SLI will be evaluated on his instructional ability, standardization, and recognition of common errors while training a LMUI and while being evaluated by a Loadmaster Evaluator.

Requirement. The LMI will demonstrate emphasis upon evaluating the LMUI's accuracy of Weight and Balance Forms, center of gravity limits, knowledge of aircraft, emergency procedures and proper cargo restraint.

Prerequisite. 390, and 500 Hours as a C-9B Loadmaster (hours waiverable by Squadron Commander based upon demonstrated maturity and experience).

312. REQUIREMENTS, QUALIFICATIONS, AND DESIGNATIONS

1. Annual NATOPS Evaluation

a. Purpose. Complete annual NATOPS qualification.

b. Crew Requirement. P/CP/CC/LME/LMI/LMUI/TSS

c. Flight Training. (1 Sortie, 4.0 Hours)

CHK-600 4.0 R E A

Goal. Annual NATOPS evaluation.

Requirement. All phases of Core Skill Introduction Training will be reviewed with emphasis on NATOPS procedures, squadron procedures and accurate and timely Weight and Balance Form computation. All emergency procedures will be conducted or simulated per current NATOPS directives. Egress procedures, with and without passengers, will be conducted and/or simulated.

2. NATOPS Evaluator Check Flight

a. Purpose. Qualify a previously designated KC-130 Loadmaster (MOS 7382) as a NATOPS Evaluator.

b. Crew Requirement: P/CP/CC/LME/LMI/LMUI/TSS

c. Flight Training (1 Sortie, 4.0 Hours)

CHK-601 4.0 R E A

Goal. NATOPS Evaluator Check Flight. Qualify a Loadmaster Instructor as a Loadmaster NATOPS Evaluator on the C-9B aircraft.

Requirement. The Loadmaster Instructor shall be evaluated by a Loadmaster NATOPS Evaluator while instructing a student Loadmaster. The Loadmaster being evaluated will display the maturity, integrity, and knowledge of the aircraft required to conduct a NATOPS evaluation.

Prerequisite. 500, and previous designation as a KC-130 Loadmaster.

313. SYLLABUS MATRIX

C-9B LOADMASTER														
STAGE	TRNG CODE	EVENT DESCRIPTION	FLIGHT HOURS	SIMULATOR HOURS	REFLY INTERVAL	DEVICE	A/C	CONDITIONS	PREREQ	POI	EVALUATION	CRP	CHAINING	EVENT CONVERSION
100 SERIES CORE SKILL INTRODUCTION														
FAM	100	EMER PROC	4.0		*	A	1		TSS	R		5.0		
CPL	110	INTRO LOADING	4.0		*	A	1	(N)	100			5.0		
CPL	111	PRAC LOADING	4.0		*	A	1	(N)	110	R		5.0		
CPL	112	REV LOADING	4.0		*	A	1	(N)	111	R		5.0		
CPL	113	INTRO MIX LOADING	4.0		*	A	1	(N)	112	R		5.0		
CPL	114	INTRO PALLET CARGO	4.0		*	A	1	(N)	113	R		5.0		
CPL	115	REV PALLET LOADING	4.0		*	A	1	(N)	114	R		5.0		
CPL	116	REV MIXED AND PALLET	4.0		*	A	1	(N)	115	R		5.0		
CPL	117	CARGO PROGRESS CHECK	4.0		*	A	1	(N)	116	R		5.0		
VIP	120	INTRO VIP	4.0		*	A	1	(N)	100			5.0		
VIP	121	REV VIP	4.0		*	A	1	(N)	120			5.0		
VIP	122	VIP PROGRESS CHECK	4.0		*	A	1	(N)	121	R		5.0		
			48.0									**60.0**		
200 SERIES CORE SKILL BASIC														
CPL	200	INTRO OVERWATER	6.0		*	A	1	(N)	190			5.0		
CPL	201	REV OVERWATER	6.0		*	A	1	(N)	200			5.0		
CPL	210	ANNUAL OVERWATER	6.0		365	A	1	(N)	201	R		5.0	201	
			18.0	**0.0**								**15.0**		
300 SERIES CORE SKILL ADVANCED														
FAM	300	HAZ CARGO	3.0		*	A	1	(N)	100	R		10.0		
CHK	390	EVAL	4.0		365	A	1		300	R	E	10.0		
			7.0	**0.0**								**20.0**		
400 SERIES CORE PLUS														
CPL	400	INTRO MAX CARGO	5.0		*	A	1	(N)	114			2.5		
CPL	401	REV MAX CARGO	5.0		*	A	1	(N)	400	R		2.5		
			10.0	**0.0**								**5.0**		
500 SERIES INSTRUCTOR TRAINING														
IUT	500	IUT EVAL	3.0		*	A	1		390	R	E	2.0	390, 600	
			3.0	**0.0**								**2.0**		
600 SERIES REQUIREMENTS, QUALIFICATIONS, DESIGNATIONS														
CHK	600	NATOPS	4.0		365	A	1		390	R	E	0.0	390	
CHK	601	NATOPS EVALUATOR	4.0		365	A	1		600	R	E	0.0	390, 600	
			8.0	**0.0**								**0.0**		

CHAPTER 4

C-9B TRANSPORTATION SAFETY SPECIALIST

*** * N O T E * ***

Crew Resource Management (CRM) will be briefed for all flights and aircrew positions.

CHAPTER 4

C-9B TRANSPORTATION SAFETY SPECIALIST

400. C-9B CORE COMPETENCY

1. Mission. See Chapter 1.

2. Mission Essential Task List (METL). See Chapter 1.

3. Table of Organization. See Chapter 1.

4. Core Capability Statement. See Chapter 1.

5. Mission Essential Task List/Core Skill Matrix. C-9B Transportation Safety Specialist (TSS) Core Skills directly support the METL as follows:

MISSION ESSENTIAL TASK	TSS CORE SKILL		
	FAM	VIP	CHK
a. Conduct Airlift in the JOA	X	X	X
b. Provide Airlift Support to DOD and other Government Agencies	X	X	X

6. Designation Table. The table below delineates T&R events required to be completed to attain initial designations. All stage lectures, briefs, squadron training, prerequisites, and open and closed book NATOPS exams shall be complete and graded prior to completing evaluation flights. Designation letters signed by the commanding officer shall be placed in individual NATOPS and APR jackets.

DESIGNATION	DESIGNATION REQUIREMENTS
TRANSPORTATION SAFETY SPECIALIST	CHK-390, and 50 hours in C-9B
TSS INSTRUCTOR	IUT-500,501,502
TSS NATOPS EVALUATOR	RQD-602

401. PROGRAM OF INSTRUCTION (POI) FOR BASIC TRANSPORTATION SAFETY SPECIALIST

A Basic Transportation Safety Specialist shall be defined as a TSS who completes all Core Skill Introduction, Core Skill Basic, and Core Skill Advanced Training. The TSS Under Instruction shall be screened by the squadron Aircrew Screening Board and approved by the commanding officer prior to commencing this POI. All decisions as to POI eligibility rest with the commanding officer. The TSS Under Instruction shall be considered qualified to function as a qualified TSS on both CONUS and OCONUS missions and passenger and cargo missions upon completion of the Core Skill Advanced Phase. Additionally, the TSS becomes eligible for consideration by the squadron Standardization Board for assignment to the Loadmaster syllabus after completion of TSS Core Skill Advanced Training and subsequent designation as a TSS. The Core Plus Phase (Overwater/International) is established to ensure the TSS has been exposed to Overwater/International procedures prior to assignment to the TSS Instructor and TSS NATOPS Evaluator Phases. As such, the Core Plus Phase shall be complete prior to commencing the TSS Instructor or TSS NATOPS Evaluator syllabus.

WEEKS	COURSE/PHASE	ACTIVITY
1	Water Survival/Flight Physiology	NAWSTP
2	Ground Training	VMR-1
2	Core Skill Introduction Phase	VMR-1
3-6	Core Skill Basic Phase	VMR-1
7	Core Skill Advanced Phase	VMR-1
8	Core Plus Phase	VMR-1

402. POI FOR REFRESHER TRANSPORTATION SAFETY SPECIALIST. The TSS Under Instruction must have flown in the capacity as a C-9B TSS during the previous two years in order to be eligible for this Refresher POI. The TSS Under Instruction shall have been recommended by the squadron Standardization Board and approved by the commanding officer prior to commencing this Refresher POI. All decisions as to POI eligibility rest with the commanding officer.

WEEKS	COURSE/PHASE	ACTIVITY
1	Water Survival/Flight Physiology*	NAWSTP
2-3	Core Skill Introduction & Basic Phase (Refresher Coded Events only)	VMR-1

* Required only if NAWSTP Swim Qualification is expired

403. POI FOR TRANSPORT SAFETY SPECIALIST INSTRUCTOR UNDER TRAINING The TSS Under Instruction shall have been recommended by the squadron Standardization Board and approved by the commanding officer prior to commencing this POI. All decisions as to POI eligibility rest with the commanding officer. The TSS Under Instruction shall be complete with the Core Plus Phase prior to assignment to the TSS Instructor or TSS NATOPS Evaluator Training.

WEEKS	COURSE/PHASE	ACTIVITY
1	TSS Instructor Training	VMR-1
2	TSS NATOPS Evaluator Training	VMR-1

404. SQUADRON LEVEL GROUND TRAINING

1. General. The following one-week ground training syllabus is intended as squadron-level training for Transport Safety Specialists during initial qualification. Refresher Transport Safety Specialists are exempt from this ground training syllabus. This ground training may be conducted concurrently with the flight training syllabus. However, the ground training syllabus must be complete prior to the CHK-390 flight. While not required for any TSS designation, every effort should be made to send each TSS to an established Commercial Airline Flight Attendant Course.

2. Squadron Ground Training Syllabus

a. Week 1

(1) General Aircraft Description
(2) Aircraft Systems
(3) Aircraft Emergency Equipment and Systems
(4) Emergency Procedures
(5) TSS Procedures and Responsibilities
(6) Personal Flying Equipment Requirements
(7) Aircraft Mission
(8) NATOPS Open and Closed Book Examinations

405. FLIGHT PERFORMANCE REQUIREMENTS

1. General

a. The time required to qualify a C-9B Transportation Safety Specialist will vary depending on flight time availability. Training will generally be accomplished in conjunction with operational flights. Every effort should be made to conduct VIP training codes aboard actual VIP Code missions. However, it is permissible to conduct simulated VIP missions as required in order to continue a TSS Under Instruction through the syllabus.

b. A Basic Transportation Safety Specialist shall be defined as a designated TSS who has completed at least Core Skill Advanced Training. A Refresher TSS shall be defined as a previously-designated C-9B TSS who has been assigned to other duty preventing currency in the C-9B aircraft for a period exceeding 12 months. A TSS who has been assigned to other duty preventing currency in the C-9B aircraft for a period exceeding 24 months is not eligible for Refresher TSS training and must complete the entirety of the TSS Core Skill Introduction, Core Skill Basic, and Core Skill Advanced prior to redesignation as a TSS.

c. TSS training and designation sets the foundation for follow-on training as a Loadmaster Under Instruction or Crew Chief Under Instruction. Completion of TSS Core Skill Advanced Training and subsequent designation as a TSS is a requirement for a C-9B aircrewman to be considered by the squadron Standardization Board for assignment to either the Loadmaster syllabus or Crew Chief syllabus.

d. All of the TSS training shall be performed in accordance with this T&R chapter, OPNAVINST 3710.7, current squadron directives, and NAVAIR's 01-C9BAAA-1, 01-C9BAAA-9, and 01-1B-50.

2. Syllabus Assignment. A Basic TSS shall complete all flights in Core Skill Introduction, Core Skill Basic, and Core Skill Advanced Training prior to Designation as a TSS. A Refresher TSS shall complete all flights marked with an R in the POI column of the syllabus matrix for the Training Syllabus assigned (i.e. Core Skill Introduction, Core Skill Basic, Core Skill Advanced, Core Plus, IUT, NATOPS Evaluator)

4. Aircrew Evaluation Flights. Open and Closed Book NATOPS exams shall be completed and graded prior to flying all NATOPS evaluation events. Aircrew Training Forms (ATF) shall be completed the first time an event is flown in any POI and for all E-coded events. All TSSs are required to have a NATOPS evaluation form filled out annually upon completion of one of the following:

a. Completion of Core Skill Advanced Training (CHK-390).

b. Completion of TSS Instructor Training (IUT-501) and NATOPS Evaluator Training (CHK-601).

c. Completion of an Annual NATOPS evaluation (CHK-600).

406. CORE SKILL INTRODUCTION TRAINING

1. Familiarization (Equipment and Servicing Procedures)

a. Purpose. Familiarize the TSS Under Instruction (TSSUI) with the C-9B aircraft. Introduce NATOPS procedures, operation and servicing of aircraft equipment, and all duties and procedures required of a qualified TSS.

b. Crew Requirement. P/CP/CC/LM/TSSI/TSSUI

c. Flight Training (3 Sorties, 12.0 Hours)

FAM-100 4.0 A

Goal: Cabin facilities introduction.

Requirement. TSSUI will be instructed in the following areas by a qualified TSS. Preflight responsibilities of the TSS, operation of the heads, coffee makers, freezer, refrigerator and ovens, duties of the TSS during the flight and postflight duties. Review all material covered during ground training phase.

Prerequisite: Nomination by Aircrew Screening Board, approval of nomination by squadron Commanding Officer, successful completion of Water Survival and Flight Physiology.

FAM-101 4.0 R A

Goal: Servicing introduction and review of previous instruction.

Requirement. TSSUI will be instructed in the following areas: servicing of heads to include maintenance of servicing carts and a review of holding tank capabilities of the aircraft, servicing of fresh water cart and capacities of the holding tank of aircraft. Review previously covered material as necessary.

Prerequisite: 100.

FAM-102 4.0 R A (N)

Goal: Introduce the TSS responses/actions required during each ground and airborne emergency.

Requirement. The TSSUI shall be instructed in the proper response to the following emergencies; rapid decompression/emergency descent, fuselage fire, smoke and fumes elimination, door warning in-flight, crash landing/ditching.

The TSSUI will be instructed in the use and refilling of walk around oxygen bottles and location and use of all emergency equipment.

Prerequisite: 101.

407. CORE SKILL BASIC TRAINING (PASSENGER HANDLING)

1. Passenger Handling Procedures

a. Purpose. Instruct a TSSUI in proper procedures for passenger handling.

b. Crew Requirement. P/CP/LM/TSSI/TSSUI

c. Flight Training (2 Sorties, 8.0 Hours)

FAM-220 4.0 R A (N)

Goal: TSSUI will be instructed on TSS responsibilities on a passenger flight.

Requirement. Areas to be introduced will include: passenger and baggage handling; responsibilities on turn-arounds; handling, storing, preparing, and serving in-flight meals, and RON procedures. Review previously covered material as necessary.

Prerequisite: 102.

FAM-221 4.0 A (N)

Goal: Progress check.

Requirement. TSSUI will demonstrate proficiency of material covered in FAM-220.

Prerequisite: 220.

2. VIP Procedures

a. Purpose. Instruct a TSSUI in the proper procedures when carrying a VIP passenger "Code 7" and above.

b. Crew Requirement. P/CP/LM/TSSI/TSSUI

c. Flight Training (2 Sorties, 8.0 Hours)

VIP-230 4.0 R A (N)

Goal: TSSUI will be instructed on TSS responsibilities on a VIP flight.

Requirement. Introduced items will include: procedures during the flight and appearance during the flight. Review previously covered material as necessary.

Prerequisite: 221.

VIP-231 4.0 A (N)

Goal: Progress check.

Requirement. TSSUI will demonstrate proficiency of material covered in VIP-130.

Prerequisite: 230.

408. CORE SKILL ADVANCED TRAINING

1. NATOPS Evaluation Flight

a. Purpose. To qualify a TSSUI as a TSS.

b. Crew Requirement. P/CP/LM/TSSI/TSSUI

c. Flight Training (1 Sortie, 4.0 Hours)

CHK-390 4.0 R E A

Goal: Evaluation flight.

Requirement. TSSUI will successfully complete a flight evaluation administered by a designated NATOPS Transport Safety Specialist Instructor. All previously introduced training shall be covered with particular attention given to NATOPS and emergency procedures.

Prerequisite: 231, NATOPS Open and Closed book Examinations. 50 hours time in model, 100 hours time in model before progressing to TSS Instructor, Loadmaster or Crew Chief positions. These flight time parameters may be waived by the commanding officer depending on experience and demonstrated proficiency.

409. CORE SKILL PLUS TRAINING (OVERWATER/INTERNATIONAL)

1. Familiarization (International Flight)

a. Purpose. To instruct a TSSUI in procedures required when flying on Overwater/International flights. This phase is established to prepare the TSSUI for follow-on instruction in the TSS Instructor and TSS NATOPS Evaluator Phases. The Core Skill Plus Phase is not required in order for a TSS to serve aboard an Overwater/International flight.

b. Crew Requirement. P/CP/LM/TSSI/TSS

c. Flight Training (2 Sorties, 12.0 Hours)

FAM-400 6.0 R A (N)

Goal: TSSUI will be instructed on procedures required of a TSS on a transoceanic flight.

Requirement. TSSUI will announce overwater brief to passengers or crew.

Prerequisite: 390.

FAM-401 6.0 R A (N)

Goal. Progress check.

Requirement. TSSUI will demonstrate proficiency with material covered in FAM 400.

Prerequisite: 400.

410. TRANSPORTATION SAFETY SPECIALIST INSTRUCTOR TRAINING

1. Instructor Under Training (IUT)

a. Purpose. Qualify a TSS as a TSS Instructor (TSSI).

b. Crew Requirement. P/CP/CC/LM/TSSI(or TSSE)/TSS/TSSUI

c. Flight Training (2 Sorties, 8.0 Hours)

IUT-500 4.0 E A

Goal: The TSS shall observe a TSSI instruct a TSSUI.

Requirement. The TSS shall observe a TSSI instruct a TSSUI on a syllabus flight. The TSSI shall demonstrate emphasis upon evaluating the TSSUI's knowledge of aircraft servicing, passenger handling, and emergency procedures.

Prerequisite. 401. 100 hours in C-9B as a TSS.

IUT-501 4.0 R E A

Goal: TSS IUT Evaluation Flight. Qualify a TSS as a TSS Instructor on the C-9B.

Requirement. The TSS shall perform all duties of a TSSI on a flight with a TSSUI, while being evaluated by a TSS NATOPS Evaluator.

Prerequisite: 500.

411. NATOPS TRAINING

1. NATOPS Check and NATOPS Evaluator

a. Purpose. Annual NATOPS evaluation.

b. Crew Requirement: P/CP/CC/LM/TSSE/TSS/TSSUI

c. Flight Training (1 Sortie, 4.0 Hours)

CHK-600 4.0 R E A

Goal. Annual NATOPS evaluation.

Requirement. Successfully complete a NATOPS flight evaluation.

Prerequisite. 390.

CHK-601 4.0 R E A

Goal. NATOPS Evaluator Evaluation Flight. Qualify a TSS Instructor as a TSS NATOPS Evaluator on the C-9B.

Requirement. The TSSI shall be evaluated by a TSS NATOPS Evaluator while instructing a TSSUI. The TSS being evaluated must display the maturity, integrity, and knowledge of the aircraft required to conduct a NATOPS evaluation.

Prerequisite: 501

412. SYLLABUS MATRIX

C-9B TRANSPORTATION SAFETY SPECIALIST														
100 SERIES CORE SKILL INTRODUCTION														
STAGE	**TRNG CODE**	**EVENT DESCRIPTION**	**FLIGHT HOURS**	**SIMULATOR HOURS**	**REFLY INTERVAL**	**DEVICE**	**A/C**	**CONDITIONS**	**PREREQ**	**POI**	**EVALUATION**	**CRP**	**CHAINING**	**EVENT CONVERSION**
FAM TRAINING														
FAM	100	CABIN INTRO	4.0		*	A	1							
FAM	101	INTRO SERVICING	4.0		*	A	1		100	R				
FAM	102	GRND / AIR EMERG	4.0		*	A	1	(N)	101	R				
			12.0									**60.0**		
200 SERIES CORE SKILL BASIC														
FAM	220	PASSENGER	4.0		*	A	1	(N)	102	R		3.0		
FAM	221	FAM PROGRESS CHK	4.0		*	A	1	(N)	220			4.0		
VIP	230	VIP	4.0		*	A	1	(N)	221	R		4.0		
VIP	231	VIP PROGRESS CHK	4.0		*	A	1	(N)	230			4.0		
			16.0	**0.0**								**15.0**		
300 SERIES CORE SKILL ADVANCED														
CHK	390	TSS EVAL	4.0		365	A	1	(N)	231	R	E	20.0		
			4.0	**0.0**								**20.0**		
400 SERIES CORE PLUS														
FAM	400	TRANS OCEAN	6.0		*	A	1	(N)	390			2.5		
FAM	401	REV TRANS OCEAN	6.0		365	A	1	(N)	400	R		2.5		
			12.0	**0.0**								**5.0**		
500 SERIES INSTRUCTOR TRAINING														
IUT	500	TSSI INTRO	4.0		*	A	1				E	0.0		
IUT	501	TSSI REV	4.0		*	A	1		500	R	E	0.0		
			8.0	**0.0**								**0.0**		
600 SERIES REQUIREMENTS, QUALIFICATIONS, DESIGNATIONS														
CHK	600	NATOPS	4.0		365	A	1		390	R	E	0.0	390	
RQD	601	NATOPS EVALUATOR	4.0		365	A	1		501	R	E	0.0	390,501,600	
			8.0	**0.0**								**0.0**		